Professional Liability in the Dental Practice: Lessons Learned from Closed Claims

A report from the Dentist’s Advantage Program in partnership with AIG
The Academy of General Dentistry (AGD) is proud to have provided input into the development of the Professional Liability in the Dental Practice report. We thank Dentist’s Advantage, an AGD Lead Corporate Sponsor and Member Savings & Offers Program Provider, for its work, and we hope that the report will assist our members in enhancing their risk management practices.

John Thorner, JD, CAE
Executive Director/CEO, Academy of General Dentistry

AIG
Keeping dental patients safe is an important goal shared by insurers, dentists, and patients alike. While it’s often difficult for dentists to spot situations where a patient safety concern could arise, analyzing historical evidence can provide some clues into where to look in the future. Like a treasure map for quality treatment, this landmark analysis of 5-years’ worth of AIG claims data can help readers isolate high-risk instances. Closely watching these trends can provide dentists enough early warning to prevent accidents and ensure good outcomes.

A focus on patient safety in the dental practice is essential and can be evident in everything from electronic dental recordkeeping, to enhanced day-to-day transparency within a practice, to improved patient communication. Informed consent continues to be a critical component of risk management and patient safety.

With over 30 years sound underwriting experience, AIG Programs Healthcare Industry Practice is pleased to draw on our experience, and that of the Dentist’s Advantage Program, to support dentists in instilling optimal risk management and patient safety practices now, and into the future.

Modern medicine is as miraculous as it is constantly changing. We hope this study helps you as dental practitioners stay one step ahead of the curve.

Ethan Allen, FCAS, MAAA
Executive Vice President
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Product Line Manager/Vice President
AIG Programs - Healthcare Industry Practice
**Dentist’s Advantage**

Dentist’s Advantage and the National Society of Dental Practitioners are proud to have participated in the development of this industry leading report:

**Professional Liability in the Dental Practice: Lessons Learned from Closed Claims.**

This detailed report, over 16 months in the making, focuses on actual claims experience of the more than 17,000 clients of the Dentist’s Advantage Program. The report findings have been designed to be shared with the entire dental industry. Ideally, every dentist will read this report and find something they can adopt in their practice that will help reduce their professional liability exposure and make their practice safer for the patients they treat.

Without the significant contribution of several organizations this report would not have been possible:

- Our underwriting partner, AIG, provided expert analysis and documentation of the claim data. This report would not have been possible without their participation. Their contribution is greatly appreciated.

- Intercare Insurance Services played a key role in accumulating and reporting the data for AIG’s analysis. Many thanks to the Intercare team for their participation in this project.

- The Academy of General Dentistry ensured that we kept the appropriate perspective in the preparation of this report. A specially designated committee provided a valuable sounding board for the survey questions, the report narrative and the case studies. Dentist’s Advantage is proud to be a strategic partner with the AGD for nearly 14 years. Having the AGD involved in this project has been critical to its success. Thank you AGD doctors and staff.

- The National Society of Dental Practitioners, NSDP, created in 1985 by Dr. Burton Pollack, exists to provide dentists with risk management education. The NSDP was the driving force behind this study, creating the concept and providing the funding that allowed Dentist’s Advantage to spearhead this report.

Though Dr. Pollack is no longer active in the NSDP, it is with great pride that the NSDP Board of Directors dedicates this claim study to Dr. Pollack in recognition of his limitless dedication to the risk management education of dentists. Thank you Dr. Pollack.

Sincerely,

Mark J Buczko, CPCU, CIC, RPLU
Vice President, Dentist’s Advantage
President, National Society of Dental Practitioners
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Section 1 - Executive Summary

Risk management and patient safety are top concerns for dentists. The AIG Programs Healthcare Industry Practice, in partnership with Aon Affinity Healthcare, offers The Dentist’s Advantage Program, which currently provides more than 17,000 dentists nationwide with professional liability insurance and risk management support. This study draws on data from the past five years (2008-2012) of closed claims from Dentist’s Advantage to identify and analyze malpractice losses in the dental field.

Key findings from the study include:

- Error/improper performance was the most common allegation in indemnity claims (74 percent)
- Oral surgery claims were the most costly, resulting in the highest mean indemnity payment of $71,189
- Dentists who had more than one claim brought against them in the five-year period had a higher mean indemnity ($83,124) than dentists who faced a single indemnity claim ($37,533) during the time period
- Nearly 60 percent of the 1,472 non-license protection claims analyzed resulted in no indemnity payment (considered expense-only claims), with 40 percent resulting in some indemnity payment
- The mean indemnity payment for the study period was $35,729, with a mean expense of $17,547
- The mean expense-only claim was $5,896
- The average number of months from the time of an alleged incident to the closing of the resulting indemnity claim was 21 months; the higher the indemnity payment, the longer the time period from incident to close
- Dentists in the Dentist’s Advantage Program experienced a greater proportion of claims with indemnity payments less than $5,000 as compared to the general population of those reported to the National Practitioners Data Bank (33 percent versus 19 percent)

The past experience of closed claims can shape efforts to improve care, avoid harm and support patient safety and risk management. Focus on patient safety in the dental practice is essential and can be evident in everything from electronic dental recordkeeping, to enhanced day-to-day transparency within a practice, to improved patient communication. Informed consent continues to be a critical component of risk management and patient safety.

With over 30 years sound underwriting experience, AIG Programs Healthcare Industry Practice is pleased to draw on our experience, and that of the Dentist’s Advantage Program, to support dentists in instilling optimal risk management and patient safety practices now, and into the future.
The goal and purpose of this report and the claims scenarios is to identify situations and practices that may lead to adverse events and claims. Using these lessons and employing the risk management/patient safety strategies included in the paper will provide guidance that can help dental practices avoid future claims, complaints, and professional licensure actions.

Section 2 - Background

The Dentist’s Advantage Program (hereafter the Program) has been providing dentists with professional liability insurance and risk management support for over 50 years. In partnership with American International Group (AIG)\(^1\), Dentist’s Advantage currently protects more than 17,000 dentists nationwide. The Program was enhanced in 2000 through a strategic partnership with the Academy of General Dentistry (AGD), and in 2008, through another partnership with the National Society of Dental Practitioners (NSDP), a risk management organization for dentists. The NSDP acts in an advisory capacity to the Program, collaborating with a board of licensed practicing dentists, dentist attorneys, and dentist risk professionals to provide counsel and insight that enables the Program to keep pace with the constantly evolving needs of the dental profession.

The Program offers dentists both professional liability insurance coverage as well as value-added risk management services, such as services that support patient safety through education, consultation and other resources provided by AIG. The NSDP provides policyholders with risk management information and education through publications and web-based resources. The Program provides coverage for both professional liability claims and complaints to state licensure boards, with claims adjustors assigned and legal counsel engaged for policyholders as necessary and appropriate.

While risk management and patient safety can help to significantly reduce adverse events and communication problems with patients, claims and complaints will inevitably occur. Many risk management and insurance programs draw on past experience, analyzing historic claims to identify risks and trends and glean lessons that can enhance future efforts to manage risk and avoid claims.

\(^1\) AIG provides insurance for the Program through its member company, National Union Fire Insurance Company of Pittsburgh, PA.
Section 3 - Purpose

Much can be learned from the analysis and study of closed claims from professional liability programs. The purpose of this report is to allow the dental community to use data and analysis from the closed claims experience in the Program to better understand exposures and mitigate professional liability risks.

The examination of closed claims against dentists provides an opportunity to educate dentists on the types of allegations and treatments that may give rise to future claims. In addition, financial data, including expenses incurred in analyzing, managing and defending claims, as well as indemnity payments made to claimants, can be aggregated to analyze overall claim trends. Fact patterns from specific claims can be rich with information on what may have led to an adverse outcome or breakdown in communication, providing another excellent source of learning. The analysis and interpretation of aggregated claims data, coupled with selected synopses of specific claims, offers up an informative profile of current trends and specific pitfalls. This information can be useful in identifying and reinforcing dentistry risk management principles and practices and patient safety principles, as well as in improving communication with patients.
Section 4 - Data and Methodology

Claims management for the Program is provided by Intercare Insurance Services in Bellevue, WA (hereafter referred to as Intercare). Data for this study was abstracted from Intercare’s database and is based upon a five-year period (2008-2012). The specific methodology for the study is described below.

The study period was defined as January 2008 (when AIG initiated its role as the Program’s professional liability carrier) through December 2012. Information related to data for eligible claims was extracted by Intercare. Payments were summarized by a unique claim ID for legal fees, total expenses, total indemnity, and total overall cost. Data related to the insured dentist’s claim and summarized payment data were merged by a unique claim code.

The initial Intercare data for the five-year study period (as of April 2013) included 3,310 separate claim/incident records representing 2,640 insured dentists. Filter criteria was applied to assign each claim record to one of three data subsets for study purposes:

1) professional liability closed claims resulting in expenses paid but no indemnity payments (N = 872),
2) professional liability closed claims resulting in indemnity payments (N = 600), and
3) license protection closed claims (N = 368).

In addition to the data from the Program, a data subset was extracted from the National Practitioner Data Bank Public Use File (NPDB PUF) for comparison to the Program’s indemnity claims. Dentists are required to report claims to NPDB. Filter criteria for the comparison included year of act or omission (years 2008 – 2012 were included), practitioner work states observed in the Program indemnity claims data subset, and valid data for patient gender (i.e., unknown gender records excluded). The result was 588 Program paid indemnity claims compared with 2,346 claims in the NPDB PUF subset. All payments were adjusted for inflation using the Consumer Price Index for all urban consumers (CPI-U).

Categorical variables included expenditure level (indemnity/expense), practitioner work state, urban-rural population density classification, patient age (18 or older versus younger than 18), general allegation, and general treatment category. Urban-rural population density classification was assigned based on practitioner location using the 2006 National Centers for Health Statistics (NCHS) urban-rural classification scheme (Centers for Disease Control and Prevention, Atlanta, Atlanta, 2006).

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GA, USA). Continuous variables included the number of months from incident to closed claim, patient age, and expenditure ratios. Categorical variables for the Program indemnity-NPDB PUF comparison included expenditure level, practitioner work state, patient gender, age (20 or older versus under 20), and general allegation.

Unique claim cause codes were regrouped into fewer general allegation categories by reviewing the claim cause descriptions and assigning each one to a unique category based on the NPDB PUF specific allegations. The NPDB PUF specific allegation codes are described under the following specific allegation categories:

- failure to take appropriate action
- delay in performance
- error/improper performance
- unnecessary/contraindicated procedure
- communication/supervision
- continuity of care/care management
- behavior/legal

In some cases, the allegation could not be determined from available records or was not classified.

Specific treatment/procedure code was regrouped based on the general nature of the treatment or procedure. These groups include:

- diagnostic
- preventive
- restorative
- implant
- endodontic
- periodontal
- orthodontic
- prosthodontic
- oral surgery, and
- other (e.g., first aid)

Differences in continuous variables were tested using the two-sample t-test or ANOVA. Two-sample proportion differences were tested using binomial proportion. All tests were two-sided with significance at p < 0.05. Analysis was conducted using SAS v9.3 and SAS/STAT v12.1 (Cary, NC, USA).
Section 5 - Professional Liability Claims Resulting in "Expense-only"

Over the five-year study period the Program spent $5.1 million in the defense of malpractice claims that did not result in an indemnity payment to the patient. These are referred to as “expense-only” claims. Some 872 (60 percent) of Program claims that were filed and closed are categorized as expense only. Claims in this category include lawsuits that were:

- successfully defended on behalf of the dentist
- dismissed by the court
- concluded with judgment or settlement in favor of the dentist
- withdrawn by the plaintiff’s attorney

Table 5.1
Distribution of Professional Liability Closed Claims (2008 - 2012) with Expense Only Payment

<table>
<thead>
<tr>
<th>Claim Incident Year</th>
<th>Expense Only Claims N (%)</th>
<th>Mean Expense Only</th>
<th>Total Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>228 (26.1%)</td>
<td>$8,797</td>
<td>$2,005,615</td>
</tr>
<tr>
<td>2009</td>
<td>269 (30.8%)</td>
<td>$6,594</td>
<td>$1,773,762</td>
</tr>
<tr>
<td>2010</td>
<td>210 (24.1%)</td>
<td>$4,842</td>
<td>$1,016,872</td>
</tr>
<tr>
<td>2011</td>
<td>128 (14.7%)</td>
<td>$2,320</td>
<td>$296,954</td>
</tr>
<tr>
<td>2012</td>
<td>37 (4.2%)</td>
<td>$1,303</td>
<td>$48,204</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>872 (100%)</strong></td>
<td><strong>$5,896</strong></td>
<td><strong>$5,141,407</strong></td>
</tr>
</tbody>
</table>

* Many claims remain open; data should be viewed as preliminary

While the mean expense over the study period was $5,896, expense payments went as high as $152,000. The costs associated with the defense of claims include:

- attorney fees
- review by subject matter experts (DDS and JD consultants)
- expert witness expenses
- deposition preparation
- trial expense
- administrative fees related to obtaining and reviewing records

One should not take away from this data the impression that claim frequency and expense has been on the decline in recent years. Some claims take several years to resolve. Claims considered in the data for 2011 and 2012 may reflect complex cases, which typically take longer to resolve and have higher expense fees attached.
Figure 5.1 provides data on the status of the claims from each year of the study as of November 30, 2013. As noted, about 25 percent of claims remain open from 2008 and 2009, with a larger proportion (83 percent) open from 2012. Claims status also impacts the indemnity claims data provided below.

**Figure 5.1**
Percent of claims open versus closed by incident year 2008-2012 (As of 11/30/2013)

Based on data from the years presumed most complete, 2008 – 2010, the mean expense was greatest in 2008. Mean expense payments exceeded $8,700 per claim, with total expense to the Program of over $2 million. Mean expense decreased in subsequent years but, as noted, the numbers are expected to rise as more complex cases are resolved and closed.
A 50-year old female presented to a general dentist requesting that her silver and amalgam fillings be removed and replaced; due to her concern about the potential health effects of the mercury content. Upon examination the dentist found that, notwithstanding the patient’s desire to have the fillings removed due to potential mercury content, the fillings were in need of replacement due to their age and condition. The patient said that she advised the dentist that she was allergic to acrylic during the initial visit; however, the alleged allergy was not noted on the patient’s medical history form. The dentist replaced six amalgam fillings with a composite material containing a minimal amount of acrylic.

The patient subsequently complained that she suffered severe pain (10 on a scale of 1 to 10) at the site of the replacement fillings for 24 hours/day, 7 days per week for two months after the treatment. She brought suit against the initial dentist, seeking economic damages and loss of earnings. She eventually had the fillings replaced with gold by another dentist.
ANALYSIS & ISSUES

- The patient claimed that she advised the dentist that she was allergic to acrylic during the initial visit; however, the alleged allergy was not noted on the patient’s medical history form.
- The composite material used in the restorations contained a minimal amount of acrylic.

The doctor, working with his claim consultant and defense attorney, decided to fight the case at a trial rather than attempting to reach a settlement. This decision was based on several key findings:

1. Although the patient said that she informed the dentist that she was allergic to acrylic, there was no clinical substantiation of this reported allergy.
   a. Specifically, experts opined that since acrylics are found in so many objects within a normal environment, if such an allergy existed it would have been evidenced almost continuously.
   b. Even if such an allergy existed, the amount of acrylic in the composite material used for the fillings was negligible and experts would testify that it was ‘inert’.

2. The patient’s claim of “pain and suffering” was suspect. The patient reported that she suffered 24/7 from severe pain and sensitivity,
   a. Though she never asked the dentist for any pain medication,
   b. Nor did she seek pain medication from any other healthcare providers.

3. We were able to present testimony of a dentist who had provided a composite filling containing acrylic for the patient several years prior, and there were no complaints of an allergic reaction, pain or sensitivity.

SETTLEMENT OR VERDICT

This case was tried to a jury verdict. The jury found in favor of the dentist. The cost to defend our client in this trial exceeded $140,000.

RISK MANAGEMENT/PATIENT SAFETY LESSONS

This case is an excellent example of the importance of thorough and accurate record keeping. Ensuring that the patient has completed the medical history form and documenting that the dentist reviewed the form with the patient is one of the most important pieces of record keeping.

In this case, had the medical history form been incomplete or had the dentist failed to document his review of the form, this may have been a very difficult case to defend. Because there was no indication on the form that the patient had an allergy to acrylic, it made it nearly impossible for the patient to prove that she had communicated this allergy to the doctor. Of course a patient may testify regarding her verbal communications (as can the dentist), but history shows that written communication and documentation almost always prevail in the courtroom.

Further, documentation regarding patient desires regarding treatment, as well as any subjective complaints, is extremely important as well. Here, because the patient chart was silent regarding patient complaints of pain or sensitivity or requests for medication, this further supported the dentist’s position that the patient was not likely experiencing the severe pain which she claimed. Even though the expert support regarding the unlikelihood of an acrylic allergy was important to the defense, had the dentist’s documentation not been thorough, the case could have easily been lost.
Section 6 - Closed Claims with Indemnity Payments

Over a five-year period, more than $29 million was paid to defend and resolve malpractice claims that resulted in indemnity payments to patients. Six hundred (40 percent) of the 1,472 malpractice claims closed during the study period resulted in an indemnity payment. The frequency of claims with indemnity payments by year is provided in Table 6.1. While it may appear that there were more claims per year in the first three study years (2008, 2009, and 2010), the lesser frequency in years four and five (2011 and 2012) is due to the inclusion of closed claims only; the remaining claims (63 percent from 2011 and 83 percent from 2012) are still in process. Thus, the actual number of claims with indemnity payments will eventually be greater. As noted, the mean indemnity payment for the study period was $35,729. For the first three study years the mean indemnity payments were $49,830, $33,543, and $28,492, respectively. The mean indemnity payment for 2011 is noted at $32,445 for far fewer claims, indicating that the year may be developing in a comparable fashion to the previous three and may result in yet a higher mean payment. The data from 2012 is too preliminary to make any assumptions.

The mean expense for the management of these claims within the study period was $17,547. The range for the first three years is noted at $15,187 to $26,236. The mean expense in the last two years is much lower ($4,937 and $2,604), but will no doubt increase when more of the claims from those years are closed. The total expense for the study period was $8,089,062.

<table>
<thead>
<tr>
<th>Claim Incident Year</th>
<th>Indemnity Claims (N%)</th>
<th>Mean Indemnity</th>
<th>Mean Associated Expense</th>
<th>Total Indemnity Paid</th>
<th>Total Expense Paid</th>
<th>Total Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>152 (25.3%)</td>
<td>$49,830</td>
<td>$26,236</td>
<td>$7,574,139</td>
<td>$3,594,271</td>
<td>$11,168,410</td>
</tr>
<tr>
<td>2009</td>
<td>224 (37.3%)</td>
<td>$33,543</td>
<td>$16,041</td>
<td>$7,513,738</td>
<td>$2,967,668</td>
<td>$10,481,406</td>
</tr>
<tr>
<td>2010</td>
<td>121 (20.2%)</td>
<td>$28,492</td>
<td>$15,187</td>
<td>$3,447,530</td>
<td>$1,290,858</td>
<td>$4,738,388</td>
</tr>
<tr>
<td>2011</td>
<td>75 (12.5%)</td>
<td>$32,445</td>
<td>$4,937</td>
<td>$2,433,361</td>
<td>$202,410</td>
<td>$2,635,771</td>
</tr>
<tr>
<td>2012</td>
<td>28 (4.7%)</td>
<td>$16,727</td>
<td>$2,604</td>
<td>$468,368</td>
<td>$33,856</td>
<td>$502,224</td>
</tr>
<tr>
<td>Total*</td>
<td>600 (100%)</td>
<td>$35,729</td>
<td>$17,547</td>
<td>$21,437,137</td>
<td>$8,089,062</td>
<td>$29,526,199</td>
</tr>
</tbody>
</table>

* Many claims remain open; data should be viewed as preliminary
Various factors may influence the potential amount of indemnity paid. More detail related to allegation classification and type of treatment will be provided below. Figure 6.1 provides the distribution of indemnity payments for the study period showing:

- 44 percent were resolved with indemnity payments of less than $9,999
- 32 percent were resolved with indemnity payments between $10,000 and $49,999
- 14 percent were resolved with indemnity payments between $50,000 and $99,999
- 9 percent were resolved with indemnity payments over $100,000
- One claim was resolved at the full policy limits of $1 million

![Figure 6.1](image)

**Figure 6.1**
Distribution of Indemnity Payments for Professional Liability Closed Claims (2008 - 2012)

Of the 600 indemnity claims, 23 percent were closed and paid with no expense. These claims are generally reviewed and settled quickly for the amount requested by the patient, usually related to the cost of retreatment. The expenses related to the remaining claims are represented in Figure 6.2. The same stratification of indemnity payment seen in Figure 6.1 was used. The percentages on the top of each bar in the chart represent the proportion of claims with expense in those strata. The line on the figure represents the mean expense for each strata; it is easily noted that the mean expense increased with the indemnity payment. The mean expense was highest for the $100,000 - $249,999 strata at $32,262. Mean expense for the next strata ($250,000 - $999,999) was slightly lower at $31,267.
Table 6.2 provides the data on the average number of months to close a claim with indemnity, demonstrating that the higher the payment, the longer it takes to settle and close the claim file. The claims resulting in payments less than $5,000 on average are closed in just over a year. However, the average time required to close claims with payments of $25,000 or more is almost twice as long, averaging over two years. The duration of time it takes to manage and close the claim is often related to the complexity of the claim and likelihood of litigation. Overall, claims with indemnity payments require an average of 21.6 months for management and settlement.

**Table 6.2**

<table>
<thead>
<tr>
<th>Category (by expenditure level)</th>
<th>Number of Claims</th>
<th>Average Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 to $4,999</td>
<td>167</td>
<td>13.6</td>
</tr>
<tr>
<td>$5,000 to $9,999</td>
<td>98</td>
<td>19.8</td>
</tr>
<tr>
<td>$10,000 to $24,999</td>
<td>112</td>
<td>22.8</td>
</tr>
<tr>
<td>$25,000 to $49,999</td>
<td>82</td>
<td>25.7</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>85</td>
<td>29.4</td>
</tr>
<tr>
<td>$100,000 to $249,999</td>
<td>51</td>
<td>27.7</td>
</tr>
<tr>
<td>$250,000 to $999,999</td>
<td>4</td>
<td>36.2</td>
</tr>
<tr>
<td>$1,000,000 or more</td>
<td>1</td>
<td>14.4</td>
</tr>
<tr>
<td>Overall</td>
<td>600</td>
<td>21.6</td>
</tr>
</tbody>
</table>
When examining claims by urban/rural setting (Figure 6.3), the data show that 55 percent of the claims came from a large metropolitan setting with an additional 25.3 percent from large fringe metropolitan settings. When comparing this data to the data found in the report from the Government Accountability Office (GAO) on Dental Services (September 2013) ([http://www.gao.gov/products/GAO-13-754](http://www.gao.gov/products/GAO-13-754)), we see that the GAO reports more dental visits in urban areas versus rural areas. In the period from 2008 to 2010, 45 percent of adults over 65 from urban areas had dental visits, compared to 34 percent from rural areas. Visits by children from 0 to 20 years were comparable, with more frequent visits in urban areas. Claims from urban settings are proportionally greater, reflecting the more frequent dental visits in these settings. The mean payment for large central metro areas was $40,901, higher than the national mean of $35,729.

As stated in Section 3 (Data and Methodology), claims were categorized into unique allegation codes using National Practitioner Data Bank methods (described below). As noted in Table 6.3, 74 percent of allegations against dentists were categorized as “Error/Improper Performance,” which saw the highest mean indemnity payment of $44,045. The types of incidents categorized within this allegation code include allergic reaction, aspiration during anesthesia, extraction of the wrong tooth, ill-fitting appliances, incorrect procedure, improper treatment, nerve damage, and other similar adverse events. This classification includes the single claim of $1 million, the full limit of the coverage.
The total paid including indemnity and expense for this classification was $26,427,408. Claims (15.8 percent) that could not be classified into one of the NPDB codes (“Allegation Not Otherwise”), resulted in the lowest mean indemnity payment of $5,208. However, of those remaining “Failure to Take Appropriate Action” (4.8 percent) and “Behavior/Legal” (3.7 percent) were most frequent. “Failure to Take Appropriate Action” claims resulted in a mean indemnity payment of $31,471. The “Behavior/Legal” category is related to non-clinical allegations and may include lack of informed consent or inappropriate behavior on the part of the dentist. These claims resulted in a mean indemnity payment of $11,974 and a maximum of $50,000. The mean expense of $13,543 exceeds the mean indemnity, indicating significant time and resources in managing this type of allegation.

### Table 6.3

<table>
<thead>
<tr>
<th>Allegation Classification</th>
<th>Closed Claims N (%)</th>
<th>Mean Indemnity</th>
<th>Mean Expense</th>
<th>Maximum Indemnity</th>
<th>Maximum Expense</th>
<th>Total Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error/Improper Performance</td>
<td>442 (73.7%)</td>
<td>$44,045</td>
<td>$18,171</td>
<td>$1,007,095</td>
<td>$186,452</td>
<td>$26,427,408</td>
</tr>
<tr>
<td>Failure to Take Appropriate Action</td>
<td>29 (4.8%)</td>
<td>$31,471</td>
<td>$18,668</td>
<td>$185,567</td>
<td>$97,416</td>
<td>$1,416,714</td>
</tr>
<tr>
<td>Unnecessary/Contraindicated Procedure</td>
<td>7 (1.2%)</td>
<td>$27,264</td>
<td>$19,204</td>
<td>$82,235</td>
<td>$73,623</td>
<td>$325,278</td>
</tr>
<tr>
<td>Continuity of Care/Care Management</td>
<td>4 (0.7%)</td>
<td>$25,216</td>
<td>$9,540</td>
<td>$52,369</td>
<td>$27,745</td>
<td>$129,485</td>
</tr>
<tr>
<td>Behavior/Legal</td>
<td>22 (3.7%)</td>
<td>$11,974</td>
<td>$13,543</td>
<td>$50,000</td>
<td>$38,190</td>
<td>$534,286</td>
</tr>
<tr>
<td>Delay In Performance</td>
<td>1 (0.2%)</td>
<td>$6,546</td>
<td>$6,546</td>
<td>$504</td>
<td>$504</td>
<td>$7050</td>
</tr>
<tr>
<td>Allegation Not Otherwise Classified</td>
<td>95 (15.8%)</td>
<td>$5,208</td>
<td>$9,563</td>
<td>$186,313</td>
<td>$75,559</td>
<td>$685,978</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600 (100%)</strong></td>
<td><strong>$35,729</strong></td>
<td><strong>$17,547</strong></td>
<td><strong>N/A</strong></td>
<td><strong>N/A</strong></td>
<td><strong>$29,526,199</strong></td>
</tr>
</tbody>
</table>

See Appendix 6 Table 6.3 for Allegation Classification descriptions

Distribution of indemnity payments by treatment classification – with claims classified by the specific area of dental treatment – may offer more insights, as seen in Table 6.4. The oral surgery claims had the highest mean indemnity payment of $71,189 with periodontic and orthodontic claims having the next highest mean payments of $55,819 and $52,430 respectively. The oral surgery classification includes the single, full-limit $1 million claim. Implant related claims were the most frequent (19.5 percent) followed in frequency by restorative related (18.5 percent), oral surgery (18 percent), and endodontic (17 percent).
Seven percent of the dentists insured in the Program had two or more claims during the study period. In reviewing their experience, it is notable that the associated mean indemnity payment (Figure 6.4) was double that of those incurred by dentists with a single claim within the same period ($83,124 versus $37,533). The mean expense was also significantly greater for dentists with multiple claims ($30,670 versus $19,024).

**Figures 6.4 and 6.5**

**Single Claim versus Multiple Claims (2008 - 2012)**

[6.4] INSURED DENTISTS WITH INDEMNITY PAYMENT

[6.5] INSURED DENTISTS WITH ASSOCIATED EXPENSES
A general dentist performed extractions of all four third molars on a 30-year old male with documented informed consent.
The dental record indicated that teeth #17 and 32 were partial bony impactions and #1 and 16 were erupted.
Within 48 hours of the initial surgery the patient complained of numbness on the left side of his tongue.
In a follow-up visit two months after the extractions, the patient continued to complain of numbness and said he was frequently biting his tongue while eating, causing bleeding which was upsetting to the patient.
The dentist had included this complication in the informed consent and told the patient that the numbness might resolve in a few weeks or months.
The dentist consulted with an oral surgeon who advised the dentist to map the tongue to follow the patient’s progress and to refer him to an oral surgeon.
Upon making this offer to the patient he requested his records and referred himself to an oral surgeon. It was determined that the numbness was irreversible and would be a lifelong issue.
After receiving the evaluation and follow-up care from the oral surgeon, the patient sued the dentist for reimbursement of the cost of additional treatment.

ANALYSIS & ISSUES
In expert review of the dentist’s records for this patient the following was observed:

- Numbness following this type of procedure is a known complication and this was noted in the informed consent document signed by the patient.
- The record contained sparse detail regarding how the procedure was performed and any difficulties that were encountered.
- If the numbness resulted from the instrumentation of the nerve this may breach the standard of care if the appropriate precautions were not taken.
- The experts determined that the nerve was apparently traumatized during the sectioning of the tooth resulting in nerve damage. It may have been severed by the scalpel as the dentist cut the flap, but the records are too minimal to determine the specific difficulties encountered.

SETTLEMENT OR VERDICT
A negotiated settlement of $150,000 was reached in this claim.
WHAT CAN WE LEARN FROM THIS?

- While the dentist performing the extractions was trained to do so, his clinical experience at that time was minimal and limited to fairly uncomplicated extractions. Because the general dentist was performing surgical extractions on the lower teeth, he was held to the same standard of care of that of an oral surgeon.
- Although the complication was known and included in the informed consent, if it is determined that the dentist’s treatment was negligent and the cause of the residual numbness, the dentist will still be liable for damages related to the injury, regardless of any signed consent form.
- A dentist’s best defense is his progress notes. A dentist should always include in the surgical notes how the procedure was performed and whether any complications arose. If there were no complications, the chart notes should reflect same.
- Once the dentist recognized that two of the teeth were impacted, the prudent course of action may have been to refer the patient to an oral surgeon.
Section 7 - Dentist’s Advantage Indemnity Claims Compared to NPDB Claims

The National Practitioners Data Bank (NPDB) was established by an act of the U.S. Congress in 1986 to improve the quality of healthcare by sharing information related to activities of specific licensed practitioners. With the establishment of the data bank, various entities, including malpractice carriers, state medical and dental licensing boards, hospitals, professional societies and other formal peer review organizations are required to report payments made for malpractice claims as well as actions taken against licensure or clinical privileges for physicians and dentists. Federal agencies within the Department of Health and Human Services, such as the Drug Enforcement Administration (DEA) and the Office of the Inspector General, are also required to report adverse actions involving activities related to the prescription of controlled substances or exclusions from participation in Medicare or Medicaid. There is significant security around the individual data, which is accessed and used by hospitals when credentialing and credentialing providers and by other organizations involved in peer review and licensing for the purposes of assuring quality of care. In addition, the NPDB provides aggregate data through its public use files (PUF), which can be used by researchers and for studies such as this, facilitating comparison to a large data set. We have accessed the PUF data to compare the reported experience to that of the dentists insured in the Dentist’s Advantage Program within the study period, with the goal to compare and contrast the experience of both groups. This allows us to compare both the allegations that drove indemnity claims and the mean payments for each.

Table 7.1 provides a comparison of the indemnity payments from the Program versus those in the NPDB for the years 2008 – 2012. NPDB PUF data contains no provider identifiers, precluding the weeding out of Program claims from the NPDB comparison data set. Thus, Program claims are counted in both data sets. For the purpose of comparison, indemnity payments in the Program group have been assigned to payment intervals specified in the NPDB PUF data dictionary (http://www.npdb.hrsa.gov/resources/publicData.jsp).

The overall mean payment for the two data sets was similar ($31,519 versus $34,302). For payments less than $5,000, mean payments were lower for the Program versus the NPDB comparison data ($2,388 versus $2,949) (p < 0.001). Proportional results for the Program data set indicate a greater percentage of payments less than $5,000 (32.7 percent versus 19.4 percent), and lower percentage of payments from $10,000 up to $24,999 (13.3 percent versus 21.2 percent) and from $25,000 up to $49,999 (10.9 percent versus 16.2 percent) (p < 0.001).
The superior results within the Program might be interpreted in several ways. The contrast may indicate better experience by the dentists within the Program, or it may reflect better management of professional liability claims by the Program. Early reporting and aggressive claims management may account for some of the observed benefit. In some venues, such as California, early disclosure of expert testimony might facilitate claims management and closure with a lower indemnity payment. In any case, the data is positive for the Program and the insured dentists within the Program.

### Table 7.1

<table>
<thead>
<tr>
<th>Categories (by expenditure level)</th>
<th>DENTIST’S ADVANTAGE</th>
<th>NPDB PUF DENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Claims N** (%)</td>
<td>Mean Claim Payment</td>
</tr>
<tr>
<td>$1 to $4,999</td>
<td>192 (32.7%)</td>
<td>$2,387</td>
</tr>
<tr>
<td>$5,000 to $9,999</td>
<td>125 (21.3%)</td>
<td>$7,918</td>
</tr>
<tr>
<td>$10,000 to $24,999</td>
<td>78 (13.3%)</td>
<td>$18,040</td>
</tr>
<tr>
<td>$25,000 to $49,999</td>
<td>64 (10.9%)</td>
<td>$35,660</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>78 (13.3%)</td>
<td>$71,651</td>
</tr>
<tr>
<td>$100,000 to $249,999</td>
<td>51 (8.7%)</td>
<td>$153,074</td>
</tr>
</tbody>
</table>

* National Practitioner Data Bank Public Use File

** Twelve claims from the Dentist’s Advantage Program were excluded from above analysis as they did not meet the filter criteria. See data and methodology for description of filter criteria.

As described in the Methods section, in order to compare the two data sets the unique claim cause codes for the Program were regrouped into fewer general allegation categories based on the NPDB PUF specific allegations. There are limitations to the reclassification process given the limited data available in the study data set. However, the top three allegations by frequency cited in Table 7.2 (excluding “Not Otherwise Classified”) reveal that the Program had proportionately fewer claims in the “Error/Improper Performance” and “Failure to Take Appropriate Action” categories and significantly more in the “Behavior/Legal” category of allegations. The mean payment for Program indemnity claims classified as “Error/Improper Performance” was higher compared with the mean NPDB payment ($38,531 versus $33,336, p < 0.05). Although the mean payments for “Failure to Take Appropriate Action” were lower for the Program versus the
NPDB experience, the difference failed to reach statistical significance. Although not statistically significant, differences are noted in the allegation classified as “Behavior/Legal” where the mean payment for the NPDB data was higher than the Program ($19,806 versus $11,610). However, the Program’s proportion of these claims was much greater (3.7 percent versus 1.6 percent) \((p < 0.001)\). These are quite different types of allegations, with the “Behavior” claims focused on unprofessional behavior and “Legal” claims focused on patient relations and communication. Situations leading to the classification of “Behavior/Legal” may be related to lack of or failure to obtain informed consent (legal), while behavioral may include sexual misconduct or other unprofessional behavior, including poor communication. It is difficult to determine why these claims were proportionately more frequent in the Program. In any case, such allegations are quite avoidable. Information on the informed consent process and sample forms are available within this report.

### Table 7.2

**Claim Comparison of Dentist’s Advantage Program with NPDB PUF (2008 – 2012) - General Allegation Classification**

<table>
<thead>
<tr>
<th>Categories (General allegation classification)</th>
<th>DENTIST’S ADVANTAGE</th>
<th>NPDB PUF DENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Claims N** (%)</td>
<td>Mean Claim Payment</td>
</tr>
<tr>
<td>Error/Improper Performance</td>
<td>431 (73.3%)</td>
<td>$38,351</td>
</tr>
<tr>
<td>Failure to Take Appropriate Action</td>
<td>29 (4.9%)</td>
<td>$30,544</td>
</tr>
<tr>
<td>Unnecessary/Contraindicated Procedure</td>
<td>7 (1.2%)</td>
<td>$26,431</td>
</tr>
<tr>
<td>Continuity of Care/Care Management</td>
<td>4 (0.7%)</td>
<td>$26,171</td>
</tr>
<tr>
<td>Behavior/Legal</td>
<td>22 (3.7%)</td>
<td>$11,610</td>
</tr>
<tr>
<td>Delay In Performance</td>
<td>1 (0.2%)</td>
<td>$8,025</td>
</tr>
<tr>
<td>Allegation – Not Otherwise Classified</td>
<td>94 (16.0%)</td>
<td>$5,183</td>
</tr>
<tr>
<td>Communication/Supervision</td>
<td>0 N/A</td>
<td></td>
</tr>
<tr>
<td>Cannot Be Determined from Available Records</td>
<td>0 N/A</td>
<td></td>
</tr>
</tbody>
</table>

** Twelve claims from the Dentist’s Advantage Program were excluded from above analysis as they did not meet the filter criteria. See data and methodology for description of filter criteria.
Section 8 - License Protection Claims

State licensing boards exist to protect consumers by ensuring that healthcare practitioners meet the education requirements and are qualified to provide care. They also provide an avenue for consumers and others to submit complaints.

In the world of dentistry, actions of the licensing board may arise from various clinical and non-clinical administrative issues, as outlined below. Complaints may be made by any patient, parent or consumer of dental care as well as employees and other dentists. While many complaints are closed with no action, state dental boards have the authority to revoke or suspend the license of any practitioner. Disciplinary actions may also include reprimand, probation, and limitation or restriction on practice.

The Program provides insurance benefits to dentists facing board complaints. License protection coverage differs from standard professional liability coverage in that there is no indemnity payment at stake. Rather, in license protection claims there are expenses incurred, including legal expenses, to evaluate the allegation and respond to the state board. An effective response is vital to enable the dentist to retain licensure and continue his or her practice, if appropriate.

Intercare, the claims administrator for the Program, has extensive experience supporting insureds in managing allegations and facilitating responses to state boards. When the insured dentist is notified of a board complaint, he/she should not dismiss the information or take it casually. The dentist should notify the claims administrator immediately. The claim administrator will open a file and move quickly to obtain more information about the complaint.

During the five-year study period there were 368 license protection claims (333 with related expense). These claims resulted in an expense to the Program of over $1.3 million. Table 8.1 shows the annual expense incurred to manage these claims. (Note that expense data for the last two years, 2011 and 2012, are likely to change as open claims remain.) The mean expense for the five study years is over $4,000 and may increase as the 2012 claims are managed and closed.
Table 8.1
Distribution of License Protection Closed Claims (2008 – 2012)

<table>
<thead>
<tr>
<th>Claim Incident Year</th>
<th>License Protection Claim N (%)</th>
<th>Mean Expense</th>
<th>Total Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>78 (23.4%)</td>
<td>$3,584</td>
<td>$279,518</td>
</tr>
<tr>
<td>2009</td>
<td>103 (30.9%)</td>
<td>$4,553</td>
<td>$468,921</td>
</tr>
<tr>
<td>2010</td>
<td>76 (22.8%)</td>
<td>$4,709</td>
<td>$357,885</td>
</tr>
<tr>
<td>2011</td>
<td>52 (15.6%)</td>
<td>$4,013</td>
<td>$208,690</td>
</tr>
<tr>
<td>2012</td>
<td>24 (7.2%)</td>
<td>$2,010</td>
<td>$48,241</td>
</tr>
<tr>
<td>Total*</td>
<td>333 (100.0%)</td>
<td>$4,094</td>
<td>$1,363,254</td>
</tr>
</tbody>
</table>

*333 claims had payment values populated out of 368 claims that met definition of license protection.

As seen in Figure 8.1, the majority of claims (77.5 percent) were managed with an expense less than $5,000. In addition to the cost of investigations, the costs of these claims may be impacted by the Program’s need to engage an attorney to assist in preparing a response and/or to attend a hearing. Two claims represented in Figure 8.1 had expenses greater than $30,000: the greater of the two had an incurred expense of over $60,000. Both of these claims involved formal board hearings and significant legal expense on behalf of the dentists involved.

Figure 8.1
Distribution of Payments for License Protection Closed Claims (2008 - 2012)
Many state licensing boards are transparent and publish the names of dentists that have had complaint hearings or board action against them. For example, some boards, such as those of Florida, Ohio and Arizona, post the minutes of each board meeting, including hearings and outcomes, on their websites. Tennessee publishes disciplinary actions of all healthcare licensing boards monthly, including the name of the individual, the reason for the action, and the penalty/ fine, if appropriate. Dental boards publish the types of violations that may lead to disciplinary action, including:

- Practicing under a lapsed license
- Failure to provide evidence of required continuing education credits
- Fraud in obtaining a license
- Inappropriate advertising
- Conviction of a felony
- Conviction of a misdemeanor in the course of practice
- Sexual misconduct
- Prescribing controlled drugs in excessive amounts
- Incompetent care
- Impairment due to drug or alcohol abuse
- Practice beyond the scope of licensure
- Failing to comply with infection control requirements
- Failing to meet continuing education requirements

Clinical issues leading to board complaints generally focus on diagnosis and appropriate treatment within the standard of dental care. The patient safety and risk management section of this report spotlights practices that can help dentists avoid board complaints.

**Case Study - License Protection**

Following a treatment plan for restoration with dentures and implants in the upper and lower jaw spanning 15 months, a 46-year old female patient filed a complaint to the state dental licensing board alleging substandard practice, abuse, poor communication, and abandonment.

**ACCORDING TO THE DENTIST’S RECORDS:**

- The patient presented with:
  - Significant tooth loss
  - A significant smoking habit of half pack/day
  - Moderate to advanced inflammation of periodontal tissues
  - Heavy stain and tartar
  - Only #5, #8 and #9 were present in her upper jaw,
  - In her lower jaw #22 and #27 were present

- The dentist provided two detailed written options for restoration with the accompanying cost of each and the patient chose to have three extractions and implants to support her denture in the upper jaw and a partial denture in the lower jaw.
During the treatment, she was very nervous and appeared to have a low pain threshold. The dentist saw the patient for many visits during the course of treatment, documenting each in detail.

The documentation included:
- The clinical findings
- Treatment recommendations
- A comprehensive informed consent form
- Actual treatments
- Notes on the verbal instructions the dentist provided to the patient
- Copies of written instructions provided to the patient
- Any other communication with the patient

The patient was advised on several occasions to stop smoking with detail regarding the ill effects of smoking on general dental health as well as healing of the implant sites.

The records also reflected provision of appropriate medications including antibiotics and pain medication.

The dentist routinely called the patient via telephone following the procedures to determine if she was having any unexpected problems or complications.

**ACCORDING TO THE PATIENT’S COMPLAINT:**

- The patient alleged the dentist did not provide her with information regarding the professional charges for the dental work in advance of the treatment. (An allegation not supported by the dentist’s records.)
- She also alleged she was not provided any post-operative instructions following the implant surgery. (An allegation not supported by the dentist’s records.)
- In addition the patient complained of pain related to the impinging nerve on tooth #9, which was treated with a pulpectomy. (An allegation not supported by the dentist’s records; this known complication was included in the initial informed consent which was signed by the patient.)

**ANALYSIS & ISSUES**

After several months the patient was dissatisfied with her restorations and told the dentist’s office she would seek another opinion.

She returned six months later to continue treatment and the dentist adjusted her upper denture and planned to complete the treatment plan. (All documented in the dentist’s record.)

When the dentist called the patient a few days later to discuss the completion of the restoration for the lower jaw, she told him she decided to go elsewhere for treatment. (Also recorded in the record; thus, the allegation of abandonment was not substantiated.)

**BOARD FINDINGS**

We provided an attorney to review the patient’s treatment history and investigate the allegations. The development of a detailed summary of the many months of care and communication in order to respond to the board complaint required many hours of review and documentation. However, since the dentist was diligent in documenting the dental record in the first place with details regarding assessment, treatment, complications and communication with the patient, all complaints were dismissed.

Dentist’s Advantage spent $2,695 in defending the dentist.
Section 9 - Patient Safety and Risk Management

The roots of the patient safety movement in healthcare may be traced back to the 1999 publication of *To Err is Human*, a study by the Institute of Medicine (IOM) that shone the spotlight on errors in the provision of healthcare services. Since that time, the patient safety movement has expanded beyond simply preventing errors in the healthcare setting to the larger charge of eliminating harm altogether. Patient safety and its principles are also promoted in dental practice and dental school curricula. Support for patient safety in dental practice was eloquently articulated in a guest editorial in the *Journal of the American Dental Association* (JADA) in September 2012. This section is designed to provide a broad understanding of patient safety in dental practice and its relationship to risk management.

While traditional risk management draws on past claims experience and lessons learned from adverse events, patient safety is grounded in a proactive approach and the notion that preventing the errors that can result in adverse events is more effective in avoiding harm and the potential for related liability.

The progression from reacting to adverse events to proactively preventing them has driven the adoption of patient safety practices throughout the world. The expectations of patients for better communication and greater transparency have further supported the movement.

The principles of patient safety are not all new, especially those related to standards of care and evidence-based practice. Both newer concepts (i.e., transparency) and more established practices (i.e., documentation) emphasize an overall culture for patient safety.

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**PRINCIPLES OF PATIENT SAFETY**

- Culture of safety – focus on communication and avoiding harm as a top priority
- Human factors engineering
- High reliability
- Just culture
- Communication
- Transparency
- Disclosure and apology
- Data capture and analysis
- Continuous learning and improvement

---

Basic risk management principles

While patient safety supports systems that avoid adverse events, it may not always translate to the avoidance of liability and medical malpractice claims. Errors may continue to occur. Some adverse outcomes are unavoidable complications of care. As in any healthcare setting, patients in dental practices may (and do) file claims because they perceive poor care or are dissatisfied with some aspect of the care or communication they receive from the provider.

In the purest sense, professional liability claims are based upon the theory of negligence which must be proven to support the validity of a claim. Negligence is defined as the failure to behave with the level of care that someone of ordinary prudence would exercise under the same circumstances. Negligence may be related to actions taken as well as omissions. In the practice of medicine or dentistry, the appropriate action is based upon the standard of care, both in selecting the appropriate care as well as implementing it (e.g., the correct procedure performed in the correct manner).

From a risk management perspective, prevention is the best policy and this prevention can be based on several strategies:

1) comprehensively evaluating the patient to assure the appropriateness of the procedure in the current environment;
2) effectively communicating the procedure and its risk to the patient with documented informed consent;
3) performing the appropriate procedures in the appropriate manner;
4) avoiding the risk by referring the patient to another provider with appropriate training and skills and/or to a more appropriate setting.

Integrating patient safety into dental practice

Most dental practices, one can assume, have risk management policies and procedures in place to assure consistency, support communication and informed consent, and avoid harm. A patient safety program is a more comprehensive approach which pervades the practice. It is supported by a strong, well-infused culture of patient safety, which focuses on transparency and creating an environment where errors and near-misses can be identified and examined to avoid future occurrences.

This notion of a patient safety culture emerged after the IOM report and has since become the foundation for all other principles around patient safety. In a recent AIG Patient Safety paper (http://www.aig.com/healthcare-and-patient-safety_3171_475145.html) a survey of senior executives and risk managers at hospitals found that the safety culture was the most critical aspect of patient safety — yet also one of the most difficult to define, support, manage, maintain, and improve. The Joint Commission, which accredits many types of healthcare organizations, requires these organizations to survey employees annually regarding the patient safety culture. The Agency
for Healthcare Research and Quality, part of the U.S. Department of Health and Human Services, offers standardized patient safety survey tools for hospitals, nursing homes, pharmacies and medical offices. These tools can be applied to dental practices too.

Conventional wisdom (confirmed in the AIG survey - [http://www.aig.com/_3171_474316.html](http://www.aig.com/_3171_474316.html)) is that a patient safety culture is a “top-down” proposition, with leadership establishing expectations and providing support to ensure expectations are met.

In addition to providing safe, appropriate care that consistently complies with external standards (e.g., high reliability), a culture of safety encourages:

- communication with patients and among staff
- transparency with patients (e.g., explaining why they are being referred to a different provider who has a higher skill level)
- disclosure of errors or adverse events with an apology (e.g., prescribing the wrong medication or restoring the wrong tooth)
- open communication with staff who are empowered to speak up if they observe something incorrect
- identification and frank discussion of errors, adverse outcomes or patient complaints
- ongoing learning and progression to continuously improve the safety culture and enhance safety practices

Various structures and processes should be developed and implemented to support high reliability, communication, clear expectations and ongoing improvement.

**Case Study – Endodontics**

- The patient, a 26-year old female, presented with the complaint of pain at #18.
- Upon examination the general dentist determined a root canal was required on #19.
- He referred her to a specialist, but the patient asked the general dentist to perform the procedure, and he agreed.
- Following the procedure the patient complained of swelling and pain.
- She was referred to a specialist who determined that the lingual aspect of #19 was perforated, allowing sodium hypochlorite to diffuse past the pulp chamber and eventually into the medullary bone, destroying a portion of the inferior alveolar nerve.
- Tissue around teeth #18 and 20 became necrotic as well requiring additional treatment.
- The patient filed a claim against the dentist.
ANALYSIS & ISSUES

• The initial swelling and pain was diagnosed as a soft tissue infection which was not treated by
  the dentist.
• He went on to complete the RTC using sodium hypochlorite and apparently allowed the chemical
  (essentially bleach) to seep out of the apices of the tooth and injure the alveolar nerve.
• The dentist’s records indicate that the patient reported that she ‘smelled bleach’ during the procedure
  and also experienced pain during an ‘injection’. This is assumed to be related to the delivery of the
  bleach via syringe, not the injection of local anesthesia.
• While use of bleach during this type of procedure is within the standard of care, the resulting risk is
  known to be a potential complication.
• Review of the dentist’s informed consent documentation, did not mention the potential for numbness.

SETTLEMENT OR VERDICT

A negotiated settlement of $145,000 was reached in this claim.

WHAT CAN WE LEARN FROM THIS?

• Root canal therapy is a routine procedure for a dentist trained and skilled in endodontics.
• However, in some instances, may be beyond the competency of an individual dentist. In this case,
  it is the responsibility of the dentist to recognize their particular limitation.
• The prudent course of action would be for the dentist to refer the patient to a specialist, and not
  permit the patient to dictate treatment by insisting the dentist perform the procedure.
• Perforating the lingual side of the tooth represented a standard of care violation which was further
  complicated by the dentist’s failure to recognize the perforation.
• Due to the failure to recognize the perforation, the dentist continued with the root canal and flushed
  the canals with bleach, which ultimately exited the canals and damaged the surrounding bone and
  adjacent nerve.
• Additionally, expert review of the records noted that the dentist did not use a rubber dam during the
  procedure. Although the absence of the rubber dam did not necessarily cause or contribute to the
  injury, the failure to use a rubber dam during the procedure further evidences the dentist’s
  substandard root canal procedures and makes the matter even more difficult to defend.
Documentation of performance

Along with written documents to convey expectations, annual performance reviews of licensed and non-licensed staff should include feedback on behavior to support the patient safety culture. The degree to which specific structures and processes are formalized in written policies and procedures may vary based on the size of a practice and its staff. A more formal and robust structure may be necessary in larger practices. In any size practice, patient safety should be an agenda item at regular staff meetings. Staff should be encouraged to identify opportunities to improve safety and to speak honestly about areas where safety can be improved. They must feel comfortable bringing safety issues to the forefront without fear of retribution or pushback.

Staff education and training is another important element. It should begin at orientation and be ongoing. While there may not be specific resources for patient safety training in dental practices, resources for other healthcare providers are readily available and applicable. Insurance carriers such as AIG as well as professional organizations such as the National Patient Safety Foundation offer webcasts, live or archived online. Local hospitals may have patient safety or risk management staff available as speakers. Simply distributing articles on various aspects of patient safety supports staff education and training. Such activities help instill the patient safety culture and encourage participation by licensed and non-licensed staff.

WRITTEN DOCUMENTS TO SUPPORT SAFE OPERATIONS

- Credentialing files for licensed staff
- Ongoing documented review of clinical competence
- Written job descriptions with responsibilities and expectations
- Procedures for phone communication including greeting and response to requests, follow-up calls, and emergency calls
- Emergency procedures
- Policies on confidentiality of information and HIPAA compliance
- Social media policies
- Dress codes and standards
- Communication expectations for staff to staff and staff to patient interactions
When an unexpected outcome or complication occurs, it should be noted by licensed staff. These incidents should be reviewed for any errors or omissions and to determine how problems might have been avoided. Formal documentation with a case summary and assessment should be maintained confidentially.

The dentist should notify the insurance company’s claims administrator if he/she believes an incident may eventually become a formal claim. If a licensed staff member recognizes that certain complications, errors or omissions occur more often than anticipated or appropriate, or if similar findings emerge from a peer review process, steps should be taken to obtain additional training or peer proctoring for the practitioner — or to abandon the specific practice which led to harm.

Disclosure to the patient should also be part of the incident review process. If the dentist identifies a specific error, he/she should inform the patient and apologize for any harm or inconvenience. Familiarity with state laws regarding apology and its potential use if a lawsuit is brought should be sought from local or state dental societies. The discussion with the patient should take place in a private and calm setting. Dentists should prepare for these discussions in advance, determining appropriate language and tone to explain the situation in an informative, non-confrontational manner. While this may seem counterintuitive to the traditional risk management approach of maintaining confidentiality around errors, the past 10 years has demonstrated that disclosure and apology in hospital settings leads to fewer claims and lawsuits as well as lower indemnity payments.

A patient may also bring a complaint unrelated to treatment or harm, as in the case of License Protection claims. Complaints can stem from issues arising from communication; a misunderstanding of treatment or subsequent discomfort; a lack of understanding of prescribed medications’ effects and side effects; office procedures; delays in treatment; or, most commonly, billing issues.

All complaints should be carefully considered and managed. Those related to treatment should be handled by a dentist. Those relating to other issues, such as billing, may be handled by an office manager or other support staff. In all cases, open, professional communication is essential and may improve patient satisfaction.

A formal log, perhaps categorizing complaints, should be established for tracking and trending incidents. A separate file with more detail should be established for complaints that are not resolved quickly. This documentation should reflect communication and actions undertaken. This real-time documentation will serve the practice well if an issue should result in a claim or complaint to the licensing board. Presenting a tangible record is much more effective than trying to recall a conversation or action in retrospect.
Communication as key to patient safety

Clear, active, and professional communication is a key principle of both patient safety and risk management. Among the considerations: licensed staff must always communicate with non-licensed and support staff in a respectful way. When involved in a procedure or prepping for a procedure, staff must be clear on the expectations and direction. This becomes especially vital when difficulty is encountered during a procedure.

The need to effectively communicate with patients cannot be over emphasized. Communication with patients and families is important to ensure that they understand the findings of an examination and recommendations for treatment. Explanations of findings and recommendations should be provided in a manner that is easily comprehended by the patient; visual aids can be used if appropriate. If there is a language difference between the dentist and the patient, it may be advisable to use an interpreter. Ideally, this would be a third party such as a member of the dentist’s office staff or another dental professional. However, it is often more practical to communicate via another family member. If this is the case, the dentist should take additional time to assure the patient understands all of the information conveyed and allow time for consideration and questions.

In addition to information regarding dental procedures and treatments, clear instructions and information regarding medication should be provided, preferably in writing.

Many published studies within the medical literature have shown that communication with patients and consideration of any questions or complaints can have significant impact on the potential for subsequent claims and lawsuits. While many practices that constitute effective communication may seem like courteous and commonsense behavior, they, nevertheless, merit purposeful consideration.

CHARACTERISTICS OF GOOD COMMUNICATION WITH PATIENTS

- Appropriate language and terms
- Good eye contact
- Attitude of interest and empathy
- Active listening
- Elicit and confirm patient understanding
- Allow time for questions and clarifications
- Use an interpreter if language difference
- Written documentation of pre- and post-procedure instructions
- Written educational materials
- Telephone numbers for post-procedure and emergency contacts
If a patient is referred to another provider, a written summary of findings and recommendations may be appropriate. If the hand-off is accomplished verbally, the referring dentist should assure the information is comprehensive including current conditions, relevant current and past medical and dental history, and allergies. Changes in condition or potential changes are also important. The referring dentist should also inform the provider taking on the care if the patient is particularly difficult or has raised issues or complaints regarding care.

**Informed consent**

Informed consent is not only a legal issue; it is critical to clear and comprehensive patient communication. Patients should be well informed on the results of examinations, problems or potential problems in their dental health and recommended procedures. Information on preventative care should be provided.

State laws guide the implementation of formal, written informed consent. All surgical procedures should be performed only with full informed consent. Some states may require or recommend a signed consent even for routine dental care.

Informed consent is required so that the patient is told of the type of procedure planned, its intended outcome and benefits, and potential complications. Informed consent should also be obtained if general anesthesia is to be administered. Alternative treatments or lack of treatment and the attendant risks should be included. This information should be conveyed by the dentist, not another staff member, in a verbal discussion which is then documented in a formal, written informed consent form. A pre-structured form provides consistency and a format for signatures and dates. A variety of informed consent forms are available for various types of procedures (e.g., orthodontic, periodontal; implant, etc.) on the Dentist’s Advantage website (http://www.dentists-advantage.com/InformedConsent).

Obtaining consent for children or impaired adults may require additional considerations and should be guided by state laws and requirements. Providers should speak with legal counsel regarding their specific state legal requirements.

If a procedure or treatment is refused, the dentist should request that the patient sign an informed refusal form. This form may protect the dentist should a claim arise in the event of an adverse outcome. This process should also convey the importance of the treatment and the potential for untoward outcomes if it is refused. Handled correctly, the process may also encourage the patient to reconsider and eventually consent to treatment.
Documentation and maintenance of dental records

The dental health record is critical in documenting a patient’s health status and numerous aspects of care. It supports continuity of care for the single provider and across providers. The information should be maintained in an organized, standardized fashion with clear, complete entries. Initial health and dental information should be recorded and changes noted as needed. Dental records must be maintained on a concurrent basis immediately after care is provided, results are obtained and reviewed, or communication with the patient is done either in person or via telephone. Handwritten entries must be legible and complete, with only acceptable abbreviations employed.

The record should accurately reflect results of examinations; recommendations for treatment; actual procedures, treatments and results; and complications or adverse outcomes. Clinical data from assessments and treatments and radiographs, with interpretation, should be included. Communication and education provided to the patient should be noted. Any complaints from the patient should be outlined, along with agreed upon resolutions. Such documentation can be important should a complaint, a potential liability claim or a dental board action arise.

Record maintenance is an important component of a risk management program and contributes to patient safety as well. Organization and management of dental records should be done in compliance with state requirements and professional standards.

Patients may request a copy of their record for a variety of reasons; such requests must be granted in a timely manner. Copies of the records should be provided with the original retained by the practice. If a record is requested by an attorney, the dentist should notify their insurance company claims administrator immediately since this may be indicative of a future legal action or claim. Similar notice should be given if a state licensing board requests a patient record.

Use of electronic dental records is expanding and eventually will become standard. There are considerable risk management benefits to electronic records (see box). However, in the age of cyber threats, system security must be carefully vetted when adopting electronic records. If paper records are maintained, they must be stored securely and protected in a manner to prevent loss in case of a fire, flood or other natural disaster. Once paper dental records are lost, recreating them can be difficult, if not impossible.

### BENEFIT OF ELECTRONIC DENTAL RECORDS

- Standardized organization and format
- Avoids handwritten, illegible entries
- Facilitates complete record with consistent entries by various providers
- Avoids physical storage which may be prone to loss in fires, floods or other events
- Cloud-storage provides safe, redundant storage and access
- Security systems built in
- Eases storage of images with record
- Makes records available to more than one practitioner or location at a time
- Provides potential for data extraction for research

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A specialist in prosthodontics placed six maxillary implants and designed a full upper denture for a 66-year old female patient. The patient was a lifelong smoker. Following the procedure, the patient complained that she could not keep the implants properly cleaned and that the denture was ill-fitting and too wide for her mouth. The implants later failed due to peri-implantitis resulting in the loss of facial and crestal bone width, height and volume. The patient required complete reconstruction of the upper jaw with either full arch implants or replacement retention implants and a new denture.

ANALYSIS & ISSUES

Two experts were consulted to review the treatment of this patient.

The radiographs and dental records were reviewed by an oral surgeon, who determined that the placement of the implants was within the standard of care and that the bone loss was due to peri-implantitis rather than incorrect implant placement. A prosthodontist reviewed the denture and believed that the denture fabricated by the insured doctor was below the standard of care in that the flange was very high, making it very difficult to keep the supporting implants clean. Furthermore, the reviewing prosthodontist believes the design of the prosthesis was the cause of the plaintiff’s peri-implantitis and eventual loss of the implants and surrounding bone.

SETTLEMENT OR VERDICT

A negotiated settlement of $150,000 was reached in this claim.

WHAT CAN WE LEARN FROM THIS?

In addition to ensuring a restoration is fabricated to the dentist’s clinical satisfaction, he or she should take note of a patient’s complaints. In this case, the dentist failed to recognize that the denture he fabricated exhibited a very high flange making effective oral hygiene difficult. Beyond this clinical oversight, the dentist should have listened to the patient’s complaints that the denture didn’t fit well and was difficult to keep clean. As superior oral hygiene is especially important with implants (especially with a patient who is a smoker), the dentist should have immediately considered making the necessary adjustments to the denture to ensure the patient was able to keep the supporting implants clean. The combination of the poorly fabricated prosthesis and the failure to recognize the patient’s inability to keep the implants clean resulted in the loss of the implants and surrounding bone.
Providing safe dental care

The provision of safe dental care is based on the expertise of the dentist in working collaboration with the patient, with consideration of evidence and consensus, including published standards where applicable. Each dentist must maintain knowledge of the standards of care as they continually advance and evolve. The skills necessary to perform procedures must also be maintained; new skills that are needed should be attained within appropriate educational settings and with appropriate proctoring. Practice outside the scope that one is prepared for by education, experience, skill maintenance and competence must be avoided.

As evidenced by the claims data in previous sections, when a dentist deviates from the standard of care, resulting in an adverse event, the potential for a professional liability claim rises. This is especially true when a dentist is practicing beyond his or her level of training and competence. For example, as outlined in the oral surgery scenario, if a dentist performs a procedure usually performed by a specialist, he/she may lack the competence or necessary skills to perform the procedure successfully. A claim is all the more likely. A dentist must refer a patient to a specialist when treatment is beyond his or her own training and skills. Lack of such documented referrals may result in claims.

For example, a recent concern is the identification of oral cancer. The ADA urges all oral health providers to increase their awareness of this risk, especially in men, and to recognize it clinically and refer patients to appropriate medical providers for definitive diagnosis and treatment. Other observations and findings of abnormal conditions should also lead to a referral to an appropriate medical provider. Failure to do so, with the requisite documentation and communication to the patient, may result in a claim of negligence. This is particularly true when it is clear in the dental record that an abnormality was present and evident during a recent dental examination and not addressed with a referral.
The dentist and his/her staff are responsible for maintaining equipment and instruments in safe, working order. Fortunately, most instruments are quite durable and maintain their function quite well when reprocessing is done appropriately. The greater risk is inadequate reprocessing and lack of infection prevention procedures. Increased attention on infection prevention arose as the prevalence of HIV (human immunodeficiency virus) increased and with the increasing concern over other blood borne pathogens, such as Hepatitis C. Industry policies and procedures subsequently improved to protect dental care providers as well as patients. The standards for these procedures were set by the Centers for Disease Control and Prevention and can be found in their Guideline for Infection Control in Dental Settings (2003) (http://www.cdc.gov/oralhealth/infectioncontrol/).


When deviation from these standards results in a patient infection, it can be viewed as negligence and result in a claim or lawsuit. State licensing boards that receive and confirm complaints related to infection control take corrective action against dentists.

Safe injection practices (SIP) have also received significant attention with the increase in recognized outbreaks of blood borne pathogen infections. For instance, the patient to patient transmission of Hepatitis C that was reported in Tulsa, Oklahoma in 2013 was caused by unsafe injection practices, including the reuse of medication vials, needles and syringes on more than one patient. Although only a single case of Hepatitis C was identified, over 4,000 patients were tested by the state for blood borne pathogen infections.

**PRINCIPLES OF SAFE INJECTION PRACTICE**

- Never administer medication from the same syringe to more than one patient
- Never enter a medication vial or IV bag with a used needle or syringe
- Never use medications packaged as single-dose or single-use for more than one patient; this includes ampoules, cartridges, and bags of IV solution
- Assign medications packaged as multi-dose vials to a single patient whenever possible
- Never use bags of intravenous solution as a common source of supply for more than one patient
- Follow proper infection control practices during the preparation and administration of injected medications
- Never combine the leftover contents of a syringe or single-use vial for later use
Matching the patient to the right setting is also important when considering patient safety and appropriate care. This is especially true if sedation or anesthesia is to be provided. In adults, underlying medical conditions such as chronic pulmonary disease may make the use of anesthesia or conscious sedation inappropriate in a dental office setting. It is also critical to evaluate the specific risks for children if such agents are to be used.

In its Guideline for Use of Sedation and General Anesthesia by Dentists, the ADA reinforces prudent practices including:

- staying within the scope of practice for which the dentist has adequate training and experience
- limiting the use of sedation and anesthesia only to patients who require it
- providing the appropriate agents in the appropriate dosage
- conducting a pre-operative evaluation of dental and medical history with consultation of appropriate medical or dental professionals
- referring high-risk patients to a higher level of care
- adequately monitoring administration of sedation or anesthesia based on the standard of care outlined in ADA guidelines
- providing appropriate equipment and drugs to respond to an emergency with staff trained and prepared to respond
- maintaining comprehensive documentation, including drugs, dosage, response, vital signs and other critical elements of documentation


**Terminating a dentist/patient relationship**

Occasionally, dentists and other healthcare providers encounter a patient who is particularly difficult or non-compliant with recommendations for care and follow-up. Non-compliance with recommended care may put the provider at risk of being associated with an adverse outcome. Laws do not require that any healthcare practitioner maintain a relationship with a non-compliant or difficult patient. Other reasons for terminating patient care may include failure to keep scheduled appointments, drug-seeking behavior, or inappropriate or rude behavior.

If a pattern of non-compliance or bad behavior persists, the dentist should inform the patient of the potential for termination verbally, but the final, official termination must be provided in writing. The patient must be given written notice with an adequate timeframe to obtain alternative care. Accusations of abandonment can be avoided if the process is undertaken thoughtfully, with appropriate documentation and patient communication.
The dentist must be diligent in recording the specifics of the situation in the dental record. The findings of examinations and assessments; treatments provided or recommended; and in-person and telephonic communication with the patient should all be well documented with sufficient detail. If the patient refuses treatment or referral, the chronology of events should be recorded and specifics of the situation outlined in detail. Other inappropriate behavior should be documented carefully in an objective, fact-based narrative.

A 30-day notice of termination is generally considered sufficient. A letter informing the patient of the withdrawal of access to care should be written on letterhead and sent via registered mail. The reason for termination may be provided, if appropriate. In addition to non-compliance or inappropriate behavior, care may be terminated if appropriate professional fees are not paid. In the letter, the dentist should provide potential resources for alternative care. This may be a referral to a local dental society or to the patient’s dental benefit provider to find an in-network provider. If the patient requires urgent or emergent care during the 30-day notification period, the dentist should provide the care as needed.

These considerations and the steps necessary to terminate a patient/dentist relationship should be codified within practice policies and procedures. This provides information and resources for staff and ensures a consistent approach to difficult situations. The procedure should also outline the potential reasons for termination and the steps in communicating the break with the patient. The final step should be notification of the scheduling system so subsequent appointments cannot be made.

Management and supervision of licensed staff

Although most dental practices in the U.S. are staffed by single practitioners, they often employ additional licensed dental professionals, usually hygienists. Licensed staff must be managed by a licensed dentist in a structured manner. When hiring licensed staff, such as hygienists or other dentists, it is imperative to confirm that their licensure is current within the state of practice. A history of any limitations or revocations of the license should also be sought. Assuming the license is current and without restriction, the supervising dentist should articulate expected professional activities in writing. The supervising dentist should also assure that the staff member is competent to perform all procedures expected. For routine procedures, occasional observation and a review of a sampling of dental records with documentation provides adequate oversight.

If there is an adverse event or unexpected outcome, the supervising dentist should discuss the incident with the hygienist or other licensed staff (dental associate) to determine the potential cause. If additional training or supervision is needed, it should be provided. All of these activities should be documented in the licensed professional’s credentialing file (different from the employee file if one exists).

If a hygienist or associate dentist has continual problems providing safe, uncomplicated care, the supervising dentist should consider a plan of corrective action and outline expectations for improvement within a specific timeframe. If improvement is not accomplished or sustained, termination should be considered.
Additional risk management considerations

When developing marketing information for a dental practice, one must avoid superlatives and overpromising results. This is especially true for cosmetic procedures, but should be an important consideration when promoting restoration procedures also. Minimizing time and expense and overstating potential results may mislead patients, resulting in dissatisfaction and distrust, as well as litigation risk.

Careful hiring and screening is very important in the current environment. It is prudent to obtain criminal background checks on all potential employees; the scope (local, state or national) depends upon the residential and employment history of the applicant. While handling of funds may be minimal with insurance and credit card payments, dental practices may maintain a supply of controlled drugs which may attract individuals with a desire to obtain them. The dentist should never write prescriptions for staff members if not specifically related to treatment rendered.

Controlled drugs must be secured, maintained, dispensed and prescribed within specific state and federal guidelines. Violation of the required procedures for storing and securing drugs or dispensing and prescribing drugs is a significant violation that may lead to suspension or loss of licensure.

The use of social media in many forms is increasing in prevalence. A dental practice may have a Facebook page or use other forms of electronic advertising or social media. Dentists must be careful to use the media appropriately. Policies and procedures within the practice should clearly prohibit any staff from discussing individual patient information or experience in social media. In addition to being unprofessional and inappropriate, such posting may violate laws and regulations such as HIPAA.
Summary and key points

Simply practicing good dentistry may not fully protect a dentist against complaints, claims and lawsuits. Lessons gleaned from closed claims data as well as claim scenarios can provide guidance to avoid risks and errors. Incorporating newer patient safety strategies in concert with traditional risk management practices will improve practice management and patient relationships. To that end, some key points dentists can take away from this study include:

- Maintaining competence and skills is key to safe delivery of care
- Providing the right care, based on the right standard, to the right patient in the right setting leads to consistent, safe practice
- When appropriate, patients should be referred to specialists for care
- Documentation of all assessments, treatments, response, complications, communication and refusals must be done consistently, preferably in an electronic record
- Informed consent should include verbal exchange followed by written documentation; language should be consistent with the patient’s language, literacy and needs
- Transparency is now an expectation of all patients in all healthcare settings
- Disclosure and apology contribute to transparency and are associated with fewer claims and lower indemnity payments
- Policies and procedures are necessary to guide and manage a dental practice, but a culture of safety is also important to ensure good communication and an open dialogue
- Infection control procedures, including safe injection practices are mandatory for safe delivery of dental care
- Sometimes dentists must terminate a relationship with a patient; this is professionally acceptable as long as it is done in a thoughtful, appropriate manner
- Professional liability insurance carriers provide more than claims management; they can provide learning opportunities and guidance to help dentists assure safe practice and avoid errors, adverse events, claims and lawsuits
Section 10 - Highlights from 2013 Qualitative Dentist Work Profile Survey

Introduction and purpose

In 2013, Dentist’s Advantage conducted a survey of dentist customers inquiring about a range of professional and risk issues. The dentist survey reflects direct feedback from two subsets of our dentist customer population – the first representing dentists who had a claim filed against them, and the second being a demographically similar group of dentist customers with no claims. Both groups of respondents electively opted to complete the 2013 survey tool. In this survey, the term respondent refers to those Dentist’s Advantage dentist customers who voluntarily replied to the survey.

The purpose of this survey was to examine the relationship between professional liability exposure and a variety of demographic and workplace factors. It should be noted that the findings in this section of the report are derived only from those dentists who responded to the 2013 dentist survey, and do not reflect all Dentist’s Advantage dentist customers or all dentists in general.

Dentist’s Advantage engaged Wolters Kluwer Health, Lippincott Williams & Wilkins (LWW) to survey dentists on these and associated issues. The population for the survey was derived from dentists who participated in the Dentist’s Advantage Program between January 2008 and December 2012.

The survey approach allowed for the comparison of several variables that may influence professional liability exposure, including:

- age, education and experience
- type of practice and procedures performed
- approach to informed consent
- sources of patient payments
- documentation methods
Survey database and methodology

The sample for the group who experienced claims consisted of 1,590 dentists who had submitted a professional liability or license protection claim within the past 5 years. This sample consisted of three subgroups: 743 with an expense-only claim, 552 with an indemnity payment, and 295 with a license protection claim. The non-claims sample was produced from a randomized sample of 10,000 current Dentist’s Advantage dentist customers similar to the geographic distribution of the claims group. Below is a table outlining the responses per each claim category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample size</th>
<th>Responses</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense-only</td>
<td>743</td>
<td>155</td>
<td>20.8%</td>
</tr>
<tr>
<td>Indemnity payment</td>
<td>552</td>
<td>87</td>
<td>15.7%</td>
</tr>
<tr>
<td>License Protection claim</td>
<td>295</td>
<td>59</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

A hybrid survey methodology was used which consisted of a printed mail survey along with an e-mailed invitation to complete an online version of the survey. To ensure a dentist did not take the survey twice, each survey was labeled with a unique identifier to ensure against duplicate respondents. The following chart summarizes the field work logistics and response.

<table>
<thead>
<tr>
<th></th>
<th>Dentists with Claims</th>
<th>Dentists without Claims</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRINT</td>
<td>ONLINE</td>
<td></td>
</tr>
<tr>
<td>Initial deployment</td>
<td>9/9/13</td>
<td>9/9/13</td>
<td>11/1/2013</td>
</tr>
<tr>
<td>Reminder #1 sent</td>
<td></td>
<td>10/1/13</td>
<td></td>
</tr>
<tr>
<td>Field Closed</td>
<td></td>
<td></td>
<td>11/11/2013</td>
</tr>
<tr>
<td>Initial sample size</td>
<td>1,590</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Undeliverable/Opt out</td>
<td>18</td>
<td></td>
<td>117</td>
</tr>
<tr>
<td>Usable sample</td>
<td>1,572</td>
<td></td>
<td>9,883</td>
</tr>
<tr>
<td># of respondents</td>
<td>301</td>
<td></td>
<td>976</td>
</tr>
<tr>
<td>Response rate</td>
<td>19.2%</td>
<td></td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Within the report, results were recorded on overall responses for the claims and non-claims segments. For those with claims, expenses, indemnity, and license protection (LP) were also recorded. The margin of error at the 95% confidence level for the claims portion of the study was ±5.1%. Additionally, the corresponding mark for the non-claims version was ±3.0%. In either case, 95% of the time we can be confident that percentages in the actual population would not vary by more than these percentages in either direction.
The payment data in this report represent actual claims filed by respondents of this survey. They were provided to LWW by Dentist’s Advantage, but only through unique identifying markers that do not implicate any specific respondent information. In other words, all parties affiliated with this study are unable to link survey responses to specific customers of Dentist’s Advantage.

Please note that the survey findings are based on self-reported information and thus may be skewed due to the respondents’ personal perceptions and recollections of the requested information. In addition, the qualitative survey results are not comparable to the quantitative dentist closed claims data in the sections which discuss the professional liability closed claims analysis or the license protection closed claims analysis.

**Summary of findings**

- A clear majority of respondents who experienced a claim self-reported as being a General Practitioner, which also accounted for the largest portion of dentists who did not experience a claim.

- Those dentists who experienced a claim reported to offer a greater distribution in every category of procedures including dental bridges, bonding, whitening, and restoration implants when compared to their non-claims colleagues. However, those performing surgical implants experienced a higher average payment ($30,014).

- For dentists who experienced claims, the percentage of their patients who were treated for less than 1 year was much higher than their non-claim counterparts (47.2 percent compared to 10.7 percent). Claim payments decreased as the length of the relationship between patient and dentist increased.

- At the time of incident, 42 percent of dentists who experienced a claim reported their patient paid for their dental services through private/group insurance. While Medicaid accounted for only 6.2 percent of claims, it resulted in the highest average payment ($52,603).

- Among dentists in the non-claims sample who responded, 59 percent indicated the patient’s money was refunded compared with only 23 percent of dentists in the total claims group. A lower average payment was observed for dentists who refunded the patient’s money at the time of the incident.

- Majority of dentists from both samples reported they obtain informed consent using both a verbal and written method. Dentists who obtained written informed consent had a lower average claim payment.

- Majority of dentists who experienced claims reported using handwritten records as their documentation method. Electronic dental records are being adopted slowly in U.S. dental practices.
Topic 1: Respondent demographics

Current position
A clear majority of dentists who experienced a claim self-reported as being a General Practitioner, which also accounted for the largest portion of dentists who did not experience a claim. From the data, for specialized dental professionals, the distribution was consistent between the claims and non-claims respondents.

Table 10.1: Position

<table>
<thead>
<tr>
<th></th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practitioner</td>
<td>92.0%</td>
<td>90.8%</td>
</tr>
<tr>
<td>Periodontist</td>
<td>2.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Endodontist</td>
<td>1.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Prosthodontist</td>
<td>1.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Oral &amp; maxillofacial surgeon</td>
<td>1.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Orthodontist</td>
<td>1.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Pediatric dentist</td>
<td>1.0%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Q: Please confirm your current position. (Claims & Non-claims)

Gender
Male respondents represented a higher percentage of sample in the claims group/category compared to non-claims group/category.

Table 10.2: Gender

<table>
<thead>
<tr>
<th></th>
<th>Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>26.4%</td>
<td>39.3%</td>
</tr>
<tr>
<td>Male</td>
<td>73.6%</td>
<td>60.7%</td>
</tr>
</tbody>
</table>

Q: What is your gender? (Claims & Non-claims)
Age
The majority of dentists having experienced a claim were over the age of 50, with 33.8 percent falling between 50 and 59 years of age. This is in contrast to those dentists who did not experience a claim, which had a fairly even distribution of dentists across the age brackets.

**Table 10.3: Age**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 years</td>
<td>0.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>30-39 years</td>
<td>9.4%</td>
<td>26.1%</td>
</tr>
<tr>
<td>40-49 years</td>
<td>25.2%</td>
<td>28.5%</td>
</tr>
<tr>
<td>50-59 years</td>
<td>33.8%</td>
<td>26.9%</td>
</tr>
<tr>
<td>60-69 years</td>
<td>23.5%</td>
<td>11.7%</td>
</tr>
<tr>
<td>70 years or older</td>
<td>8.1%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Q: What is your age? (Claims & Non-claims)

Location of dental school
The majority of dentists reported to have attended a U.S. based dental school. The distribution of the dental school locations was consistent between the claims and non-claims respondents.

**Table 10.4: Type of dental school attended**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Dental School</td>
<td>86.1%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Non-US/Canada Dental School</td>
<td>11.5%</td>
<td>9.4%</td>
</tr>
<tr>
<td>US Territorial Dental School</td>
<td>2.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Canadian Dental School</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Q: Which best describes the dental school you graduated from? (Claims & Non-claims)
Years as a dentist
Professionals with over 15-years’ experience accounted for 64 percent and 51 percent of respondents from the total claims and non-claims samples, respectively. Professionals with 11 or more years of licensure reported higher mean payments.

Table 10.5: Years as a dentist

<table>
<thead>
<tr>
<th>Years</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years</td>
<td>1.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>2-5 years</td>
<td>4.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>13.1%</td>
<td>17.8%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>17.3%</td>
<td>17.5%</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>64.4%</td>
<td>50.7%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, how many years had you been a licensed dentist? (Claims)
Q: How many years have you been a licensed dentist? (Non-claims)

Average Total Paid

<table>
<thead>
<tr>
<th>Years</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years (1.1%)</td>
<td>$3,594</td>
<td></td>
</tr>
<tr>
<td>2-5 years (4.1%)</td>
<td>$9,738</td>
<td></td>
</tr>
<tr>
<td>6-10 years (13.1%)</td>
<td>$18,281</td>
<td></td>
</tr>
<tr>
<td>11-15 years (17.3%)</td>
<td>$37,007</td>
<td></td>
</tr>
<tr>
<td>More than 15 years (64.4%)</td>
<td>$20,485</td>
<td></td>
</tr>
</tbody>
</table>
Practice size

Nearly all dentists in both claims and non-claims group worked in a solo or small practice (95.8 percent). The highest average payments were made to those associated with larger practices ($30,086).

Table 10.6: Practice size

<table>
<thead>
<tr>
<th></th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo or small (less than 6 partners)</td>
<td>95.8%</td>
<td>90.3%</td>
</tr>
<tr>
<td>Middle (7-20 partners)</td>
<td>2.4%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Large corporation (21 or more partners)</td>
<td>1.8%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Q: Which best describes the practice size where you work? (Claims & Non-claims)
Procedures performed in practice

Those dentists who experienced a claim reported to offer a greater distribution in every category of procedures including dental bridges, bonding, whitening, and restoration implants when compared to their non-claims colleagues. The higher average payment ($30,014) was observed in the surgical implant category.

**Table 10.7: Procedures Performed**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental bridges</td>
<td>94.4%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Bonding</td>
<td>90.6%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Whitening</td>
<td>87.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Implants – restorations</td>
<td>79.0%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Veneers</td>
<td>76.2%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Tooth reshaping</td>
<td>63.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Inlays/onlays</td>
<td>62.2%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Smile makeover</td>
<td>40.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Full mouth reconstruction</td>
<td>36.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Implants – surgical placement</td>
<td>33.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Gum lift</td>
<td>19.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Bite reclamation</td>
<td>16.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Botox injections</td>
<td>1.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Derma fillers (e.g., Restylane)</td>
<td>1.4%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Q: Do you perform any of the following procedures in your practice? (check all that apply) (Claims & Non-claims)

**Average Total Paid**

- Dental bridges (94.4%) $22,057
- Bonding (90.6%) $22,574
- Whitening (87.1%) $22,369
- Implants – restorations (79.0%) $21,756
- Veneers (76.2%) $22,418
- Tooth reshaping (63.6%) $25,469
- Inlays/onlays (62.2%) $25,072
- Smile makeover (40.9%) $16,308
- Full mouth reconstruction (36.4%) $10,611
- Implants – surgical placement (33.2%) $30,014
- Gum lift (19.9%) $14,508
- Bite reclamation (16.1%) $15,299
- Botox injections (1.4%) $1,840
- Derma fillers (e.g., Restylane) (1.4%) $6,215
Length of time treating a patient
For dentists who experienced claims, the percentage of patients treated less than 1 year was much higher than their non-claim counterparts (47.2 percent compared to 10.7 percent). Claim payments were seen to decrease as the length of the relationship between patient and dentist increased.

Table 10.8: Length of time treating a patient

<table>
<thead>
<tr>
<th></th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>47.2%</td>
<td>10.7%</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>31.7%</td>
<td>37.5%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>9.1%</td>
<td>19.9%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>12.0%</td>
<td>31.9%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, how long had you been treating the patient? (Claims)
Q: How long do you generally treat your patients? (Non-claims)

AVERAGE TOTAL PAID

- **Total Claims**
  - Less than 1 year: $25,863
  - 1 to 5 years: $20,983
  - 6 to 10 years: $15,742
  - More than 10 years: $15,393
Payment method
At the time of the incident, 42 percent of dentists who experienced a claim reported their patient paid for their dental services through private/group insurance. While Medicaid accounted for only 6.2 percent of claims, it resulted in the highest average payment ($52,603).

Table 10.9: Payment Method

<table>
<thead>
<tr>
<th>Source of Payment</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private/group insurance</td>
<td>42.2%</td>
<td>56.9%</td>
</tr>
<tr>
<td>Self-pay/no insurance</td>
<td>37.6%</td>
<td>27.9%</td>
</tr>
<tr>
<td>I don’t recall</td>
<td>14.0%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>6.2%</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, how did this particular patient pay you for his/her dental services? (Claims)
Q: What are the sources of payment for dental services in your practice? (Non-claims)

Average Total Paid

- Private/group insurance (42.2%): $28,605
- Self-pay/no insurance (37.6%): $17,410
- I don’t recall (14.0%): $7,858
- Medicaid (6.2%): $52,603
Patient refunds
Among dentists in the non-claims sample who responded, 59 percent indicated the patient’s money was refunded compared with only 23 percent of dentists in the total claims group. A lower average payment was observed for dentists who refunded the patient’s money at the time of the incident.

**Table 10.10: Patient refunds**

<table>
<thead>
<tr>
<th></th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23.4%</td>
<td>59.0%</td>
</tr>
<tr>
<td>No</td>
<td>68.7%</td>
<td>35.3%</td>
</tr>
<tr>
<td>Not sure</td>
<td>7.9%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, did you refund the patient’s money? (Claims)
Q: Have you refunded a patient’s money? (Non-claims)

**AVERAGE TOTAL PAID**

<table>
<thead>
<tr>
<th></th>
<th>Total Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (23.4%)</td>
<td>$14,565</td>
</tr>
<tr>
<td>No (68.7%)</td>
<td>$23,037</td>
</tr>
<tr>
<td>Not sure (7.9%)</td>
<td>$37,284</td>
</tr>
</tbody>
</table>
Treatment plan inclusions

Treatment plans involving a full mouth reconstruction had an average payment of $28,473, which was much higher than surgical and restoration implants. When compared to the non-claims data, the distribution of dentists who experienced a claim is greater in treatment plans including full mouth reconstructions or surgical placements of implants.

Table 10.11: Did the treatment plan include...

<table>
<thead>
<tr>
<th>Treatment Plan</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full mouth reconstruction</td>
<td>45.9%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Surgical placements of implants</td>
<td>43.2%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Restoration implants</td>
<td>40.5%</td>
<td>68.1%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, did your treatment plan include... (check all that apply) (Claims)
Q: Do your treatment plans include... (check all that apply) (Non-claims)
Obtaining informed consent

The majority of dentists from both samples reported to obtain informed consent using both a verbal and written method. Dentists who obtained written informed consent had a lower average claim payment.

**Table 10.12: Obtaining informed consent**

<table>
<thead>
<tr>
<th>Method</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>18.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Written</td>
<td>23.8%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Both verbal &amp; written</td>
<td>56.2%</td>
<td>67.2%</td>
</tr>
<tr>
<td>None</td>
<td>1.5%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, which best describes your method of obtaining informed consent? (check one) (Claims)

Q: Which best describes your method of obtaining informed consent? (check one) (Non-claims)

**Average Total Paid**

- Verbal (18.5%): $26,104
- Written (23.8%): $11,109
- Both verbal & written (56.2%): $26,484
- None (1.5%): $20,437
Documentation method

The majority of dentists who experienced claims reported using handwritten records as their documentation method.

Table 10.13: Documentation method

<table>
<thead>
<tr>
<th>Documentation Method</th>
<th>Total Claims</th>
<th>Non-Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handwritten medical records</td>
<td>70.1%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Electronic medical records</td>
<td>12.9%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Both</td>
<td>17.0%</td>
<td>27.7%</td>
</tr>
</tbody>
</table>

Q: At the time of the incident, which best describes your documentation method? (check one) (Claims)

Q: Which best describes your documentation method? (check one) (Non-claims)

AVERAGE TOTAL PAID

- Handwritten medical records (70.1%): $22,694
- Electronic medical records (12.9%): $16,012
- Both (17.0%): $28,610
## Appendix - Section 6 Table 6.3

### General Classification of Claim Cause Description

<table>
<thead>
<tr>
<th>General Allegation Classification</th>
<th>Intercare Claim Cause Description</th>
</tr>
</thead>
</table>
| **Allegation – Not Otherwise Classified** | First Aid/Med Pay  
Negligence  
Other |
| **Behavior/Legal** | Abandonment - Failure to Treat  
Discrimination Against Patient  
Improper Behavior / Sexual Misconduct  
Lack of Informed Consent  
Vicarious Liability |
| **Continuity of Care/Care Management** | Failure to Refer |
| **Delay In Performance** | Delay in Treatment |
| **Error/Improper Performance** | Allergic Reaction  
Anesthesia  
Burn / Abrasion / Cut  
Extraction-Wrong Tooth  
Ill-Fitting Appliance -  
Crown/Bridge Veneer/Onlay  
Ill-Fitting Appliance - Denture  
Improper Treatment - All Other  
Incorrect Procedure  
Misdiagnosis  
Nerve Injury  
Retained Foreign Body  
Struck Against Object/Patient |
| **Failure to Take Appropriate Action** | Failure to Diagnose  
Failure to Diagnose Cancer  
Infection  
Medication - Failure to Prescribe - Over Prescript  
Periodontal Disease - Failure to Diagnose |
| **Unnecessary/Contraindicated Procedure** | Unnecessary Treatment |
## Appendix - Section 6 Table 6.4
General Treatment/Procedure of Claim Cause Descriptions

<table>
<thead>
<tr>
<th>General Treatment/Procedure Classification</th>
<th>Intercare Treatment/Procedure Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis related</td>
<td>Dx - Treatment Plan</td>
</tr>
<tr>
<td></td>
<td>Dx - Test and Lab Exams</td>
</tr>
<tr>
<td>Endodontic related</td>
<td>Restorative - Apicoectomy</td>
</tr>
<tr>
<td></td>
<td>Restorative - Root Canal</td>
</tr>
<tr>
<td>Implant related</td>
<td>Crown - Resin</td>
</tr>
<tr>
<td></td>
<td>Crown - Porcelain Fused/Metal</td>
</tr>
<tr>
<td></td>
<td>Implant - Endosseous Implant</td>
</tr>
<tr>
<td></td>
<td>Implant - Implant Removal</td>
</tr>
<tr>
<td></td>
<td>Implant - Implant Repair</td>
</tr>
<tr>
<td></td>
<td>Implant - Subperiosteal Implant</td>
</tr>
<tr>
<td></td>
<td>Implant - Transosseous Implant</td>
</tr>
<tr>
<td>Oral surgery related</td>
<td>Oral Sx - Extraction w/Complications</td>
</tr>
<tr>
<td></td>
<td>Oral Sx - Simple Extraction</td>
</tr>
<tr>
<td></td>
<td>Oral Sx - Surgical Extraction</td>
</tr>
<tr>
<td></td>
<td>Oral Sx - Extraction Comp Bony</td>
</tr>
<tr>
<td></td>
<td>Oral Sx - Extraction Partial Bony</td>
</tr>
<tr>
<td></td>
<td>Oral Sx - Fistula Closure</td>
</tr>
<tr>
<td></td>
<td>Oral Sx - Tooth Reimplant</td>
</tr>
<tr>
<td>Orthodontic related</td>
<td>Ortho - Fixed Appliance Therapy</td>
</tr>
<tr>
<td></td>
<td>Ortho - Removable Appliance</td>
</tr>
<tr>
<td>Other</td>
<td>Bronchoscopy</td>
</tr>
<tr>
<td></td>
<td>Exam</td>
</tr>
<tr>
<td></td>
<td>Foreign Body/Removal</td>
</tr>
<tr>
<td></td>
<td>OTHER - DENTAL</td>
</tr>
<tr>
<td></td>
<td>Scar Revision</td>
</tr>
<tr>
<td>Periodontic related</td>
<td>Perio - Bone Replacement Graft</td>
</tr>
<tr>
<td></td>
<td>Perio - Gingivectomy -Quadrant</td>
</tr>
<tr>
<td></td>
<td>Perio - Scaling and Root Planing</td>
</tr>
<tr>
<td>Preventive related</td>
<td>Prev - Prophylaxis</td>
</tr>
<tr>
<td></td>
<td>Prev - Space Maintenance</td>
</tr>
<tr>
<td>Prosthodontic related</td>
<td>Restorative related</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Prostho - Bridge Multiple Unit</td>
<td>Restorative - Amalgams</td>
</tr>
<tr>
<td>Prostho - Bridge Single Unit</td>
<td>Restorative - Core Build Up</td>
</tr>
<tr>
<td>Prostho - Complete Upper Denture</td>
<td>Restorative - Inlay</td>
</tr>
<tr>
<td>Prostho - Lower Partial Denture</td>
<td>Restorative - Resin</td>
</tr>
<tr>
<td>Prostho - Repair Denture</td>
<td>Restorative - Temp Crown</td>
</tr>
<tr>
<td>Prostho - Retainers</td>
<td>Restorative - Veneer(s)</td>
</tr>
<tr>
<td>Prostho - Upper Partial Denture</td>
<td>Restorative - Crown Repair</td>
</tr>
<tr>
<td>Prostho - Upper/Lower Denture</td>
<td>Restorative - Multiple Crowns</td>
</tr>
</tbody>
</table>
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