2008 Survey of Pro Bono Services Provided by Practicing Prosthodontists

Steven J. Sadowsky, DDS, FACP,[1] David L. Pfeifer, DDS, MS, MEd, FACP,[2] & Charles J. Goodacre, DDS, MSD, FACP[3]

[1] Private Practice, Seattle, WA
[2] Director, Dental Department, Rossmoor Medical Center, Walnut Creek, CA
[3] Professor and Dean, Department of Restorative Dentistry, Loma Linda University, School of Dentistry, Loma Linda, CA

Keywords
Pro bono services; survey; prosthodontists.

Correspondence
Steven J. Sadowsky, 15415 Harvey Rd., Bainbridge Island, WA 98110. E-mail: sadow333@hotmail.com

Results presented at the 2009 Annual Session of the American College of Prosthodontists, San Diego, CA.

Accepted November 14, 2009

doi: 10.1111/j.1532-849X.2010.00586.x

Abstract

Purpose: The purpose of this article is to analyze data from the results of the 2008 Survey of Pro Bono Services Provided by Practicing Prosthodontists. Survey results are used to examine characteristics and to compare the charitable care rendered by practicing prosthodontists to the dental field at large.

Materials and Methods: The character and incidence of pro bono services (PBS) provided by prosthodontists are based on a 2008 survey, made possible through an American College of Prosthodontists Board of Directors' sponsored initiative. Survey results are used to assess the distribution of respondents practicing the specialty of prosthodontics in the United States, percentage of prosthodontists who render pro bono dental services for the community, percentage of total patient care devoted to pro bono treatment at no charge, number of patients treated annually with PBS, monetary value of pro bono care annually, types of pro bono procedures, percentage of practitioners using Prosthodontic Diagnostic Index (PDI), PBS by PDI category to assess complexity of donated work, and percentage of practicing prosthodontists using informatics to track services by the PDI.

Results: Thirty-nine states were represented in the survey data. The highest responses were in the most populous states. The percentage of practicing prosthodontists providing PBS was 71.7%. For this cohort, the annual percentage of total care provided for treatment at no fee was greater than 1% in more than 54.8% of the practices. Almost 50% of these prosthodontists reported treating more than five patients per year at no charge. The average annual value of donated services was $25,078.00. The types of services rendered were most frequently diagnostic (83.5%) and radiographic (76.6%), followed by operative dentistry (61.5%) and fixed prosthodontics (49.4%). The percentage of practicing prosthodontists using the PDI to establish the complexity of PBS was 17.9%. For those using the PDI, there was almost an even distribution in categories I-IV. Informatics was used to track PBS in only 3% of the respondents.

Conclusion: Based on this survey, practicing prosthodontists compare favorably to dental generalists and other specialists in terms of the annual dollar value donated in pro bono care. Their treatment addresses a broad scope of prosthodontic services including the restoration of patients with complex needs.

The adult volunteer rate declined by 15% between 1974 and 1989, but rebounded to a new high in 2005.[1] In fact, the adult volunteering rate has increased by more than 32% since 1989. Speculation on why there has been a boost of American interest in service and community engagement has centered on the catalysts of the terrorist attacks of September 11, 2001, the 2004 tsunami, and Hurricane Katrina; however, there has been a paucity of data available regarding the extent and trends of pro bono services (PBS) rendered by general dentists and specialists. Recently, a Survey of Dental Practice published in 2008 by the American Dental Association (ADA) reported that PBS performed by the general practitioner averaged $10,260 per year.[2] The survey also determined that 70.5% of all dentists provided charitable care.

In an effort to assess the status of pro bono care rendered by private practice prosthodontists, a survey was conducted by the American College of Prosthodontists (ACP) in 2008. The purpose of this article is to present the scope of the PBS offered by the respondents to include representation by states, number of patients per year, the dollar value and percentage of annual services, the complexity of the dental work, and method of tracking PBS.

Materials and methods

The 2008 Survey of Pro Bono Services by Private Practice Prosthodontists was initially mailed to 1520 members and nonmembers of the ACP in December 2008. There was one mailing of the survey, two follow-up e-mail requests, and three ACP website reminders to nonrespondents. In addition to the mailed survey, the final phase of data collection was conducted online using an Internet survey developed using Survey Monkey (SM), an Internet survey services business. The Internet survey was sent to 1452 nonrespondents to the mailed portion of the survey with valid e-mail addresses. The purpose of the online survey was to increase the overall survey response and provide information to the ACP about the feasibility of collecting prosthodontist practice data online. The overall response rate to the combined survey (mailed and Internet) was 22.8% and included 346 respondents.

Topics addressed in the 2008 survey included the U.S. state in which the respondents practiced the specialty of prosthodontics, percentage of prosthodontists who render pro bono dental services for the community, percentage of total patient care devoted to pro bono treatment, number of patients treated annually with PBS, monetary value of pro bono care annually, types of pro bono procedures, percentage of practitioners using the Prosthodontic Diagnostic Index (PDI),[3,4] pro bono dental services by PDI category to assess the level of complexity of the donated treatment, and percentage of practicing prosthodontists using informatics to track services by the PDI.

Results

The distribution of U.S. respondents by state is shown in Table 1. It demonstrates a picture similar to electoral mapping, which reflects the highest density of private practice respondents in the most populous states. The states with the highest representations were California (15.1%), New York (14.5%), Pennsylvania (6.3%), Texas (6.0%), Massachusetts (5.3%), Florida (5.0%), and Michigan (4.4%). Those states not represented are Alabama, Alaska, Arkansas, Delaware, Mississippi, Montana, North Dakota, Rhode Island, South Dakota, Vermont, and Wyoming.

The percentage of practicing prosthodontists who performed PBS was 71.7%. This included full remission of fees or discounted fees. While 66% of these respondents did not require proof of financial need from their patients, other qualifications were reported to be required of patients to obtain pro bono prosthodontic services (Table 2). These criteria ranged from referral and screening by a community clinic or organization, social/medical history profile, homeless patients, cancer patients, church referral, Medicare/Medicaid, and a current patient facing difficult financial times to a personal decision and evaluation.

Table 1 Number of respondents by state

State	Respondents
Arizona	9
California	48
Connecticut	7
Colorado	2
DC	2
Florida	16
Georgia	7
Hawaii	2
Idaho	2
Illinois	8
Indiana	3
Iowa	1
Kansas	2
Kentucky	1
Louisiana	3
Massachusetts	17
Maine	4
Maryland	4
Michigan	14
Minnesota	6
Missouri	1
Nebraska	2
Nevada	2
New Hampshire	1
New Jersey	7
New York	46
New Mexico	1
North Carolina	7
Ohio	10
Oklahoma	2
Oregon	6
Pennsylvania	20
South Carolina	5
Tennessee	2
Texas	19
Utah	1
Virginia	9
Washington	12
Wisconsin	7

The percentage of total patient care devoted to PBS is depicted in Figure 1. Of the reporting prosthodontists, 45.2% dedicated 0 to 1% of their total patient care to PBS; 39.2% committed from 1.1 to 5%, while 13% devoted 5.1 to 10%, and 2.6% contributed as much as 10.1 to 20% of their total productive practice to PBS.

The average annual number of patients treated at no charge is shown in Figure 2. Most respondents offering complete remission of fees treated 1 to 5 patients per year (52.2%), while 18.2% of practitioners treated 6 to 10 patients, 12.3% treated 11 to 20 patients, 7.4% treated 0 patients, 4.4% treated 21 to 30 patients, 3.0% treated 31 to 50 patients, 2% treated 100 to 500 patients, and .50% actually treated over 1500 patients.

Table 2 Qualifications prosthodontists require from patients for pro bono work

Referral and screening by a community clinic or organization
Low-income seniors and students
Organization or foundation in local area screens patients
Formal application process is followed
Social and medical history are required
Discounts provided to other dental professionals in the area
Other patient referrals
Personal decision and evaluation
Homeless patients
Cancer patients
Church referral
State poverty-level guidelines
Medicare or Medicaid
Current patients having touch financial times
Need and patient disposition

The value of donated annual services in terms of typical private practice fees is illustrated in Figure 3. The highest percentage of respondents donated from $5001 to $19,999 annually (33.7%). A gradient of the percentage of prosthodontists reporting different categories of monetary value for their PBS was reported as follows: $20,000 to 50,000 (22.5%), $2500 to $5000 (13.5%), $500 to $2000 (10.1%), $.00 (8.4%), $50,001 to $100,000 (8.4%), $100,001 to $250,000 (2.2%), and less than $250.00 (1.1%). The average annual dollar value of PBS was $25,078.00.

The types of pro bono procedures offered are illustrated in Table 3. The regimens in order of frequency were diagnostic (83.5%), radiographic (76.6%), operative dentistry (61.5%), fixed prosthodontics (49.4%), prophylaxis (42.4%), removable prosthodontics (39.4%), preventive dentistry (35.5%), maxillofacial prosthetics (32.5%), surgical (32.5%), implant prosthodontics (31.6%), occlusal/TMD (16.5%), and sleep disorders (4.3%).

The percentage of practicing prosthodontists using the PDI was reported to be 17.9%. The allocation of patient procedures in each PDI category is represented in Figure 4. The distribution of patients who were provided pro bono care in each PDI category was almost even and depicted as follows: Class I PDI procedures (64.6%), Class II PDI procedures (62.5%), Class III procedures (72.9%), Class IV procedures (72.9%). Recording by Informatics[5] was used by a negligible percentage (3.0%) of the respondents to track services by the PDI.

Finally, 99.3% of the respondents in the survey reported active membership in the American College of Prosthodontists. This included fellows with diplomate status who have successfully challenged the American Board of Prosthosthodontics.

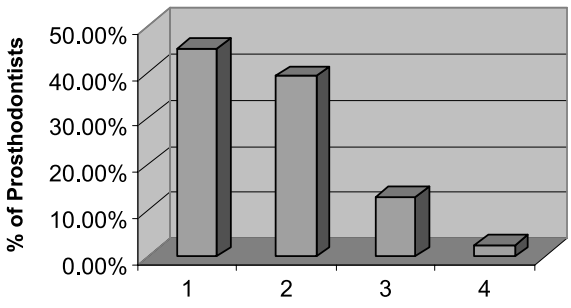

Figure 1 Percentage of total care devoted to pro bono services. 1 = 0% to 1%; 2 = 1.1% to 5%; 3 = 5.1% to 10%.

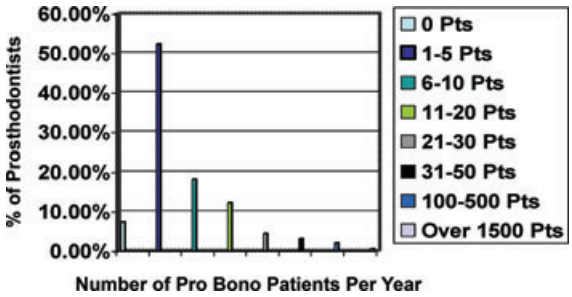

Figure 2 Number of patients treated at no charge annually.

Discussion

Based on the results of this 2008 Pro Bono Survey Provided by Practicing Prosthodontists, it is of note to draw comparisons with the 2006 ADA Survey of Dental Practice.[2] The percentage of prosthodontists providing PBS (70.7%) is virtually equivalent to the percentage of generalists and specialists donating charitable care (70.5%) as reported in the ADA Survey; however, the average dollar value of pro bono dental care provided by prosthodontists ($25,078.00) in this survey exceeded not only 2006 estimates for generalists ($10,260.00), but also the pool of all specialists ($16,940.00). An exact comparison cannot be made, however, as there is a difference in reporting period.

The majority of practicing prosthodontists providing PBS with complete remission of fees treated one to five patients annually, while almost 20% supplied PBS to six to ten patients (Fig 2). Of the 7.4% respondents who were unable to render this complimentary care, cited limitations were finances, time, and/or exigencies of a group practice. One of the burdens for a specialty limited to prosthodontics is the attendant laboratory

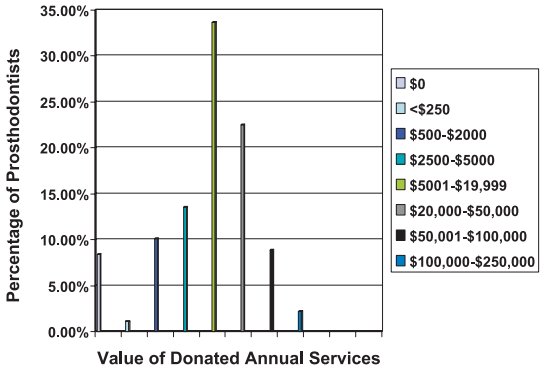

Figure 3 Annual monetary value of pro bono services.

Table 3 Types of pro bono procedures prosthodontists perform

Diagnostic	83.5%
Radiographic	76.6%
Operative dentistry	61.5%
Fixed prosthodontics	49.4%
Prophylaxis	42.4%
Removable prosthodontics	39.4%
Preventive dentistry	35.5%
Maxillofacial prosthetics	32.5%
Surgical	32.5%
Implant prosthodontics	31.6%
Occlusal/TMD	16.5%
Sleep disorders	4.3%

fees for prosthetic rehabilitation, which require out-of-pocket costs when the dental work is donated. This is undoubtedly why a majority of services offered are in the diagnostic or operative dentistry domain (Table 3). Nonetheless, it is remarkable that almost 50% of the pro bono procedures provided are for fixed prosthodontics, while 40% are for removable prosthodontics. The field of implant prosthodontics, which may be the most cost-intensive treatment, still comprises almost a third of the PBS rendered.

The distribution of patients provided PBS in each PDI category is also instructive in terms of meeting daunting needs in the community (Fig 4). Prosthodontists are trained to be equipped to handle complex treatment regimens; however, executing these plans can be challenging and time intensive. The fact that Category 3 and 4 PDI treatments are well represented in the spectrum of PBS demonstrates a willingness on behalf of prosthodontists to address these types of patients, although the PDI was used by only 17.9% of the respondents for categorizing PBS and may represent a selective sample. Those practicing prosthodontists who do not use the PDI to track the complexity of their donated treatment see it more as an academic tool, not feasible in a hospital setting, or unnecessary in an informal pro bono program. The use of Informatics is still in its infancy for a digital record of PBS. As this innovation gains more traction, which is inevitable, more reliable record keeping will enhance future surveys.

There are limitations inherent in all surveys. In this 2008 Survey of Pro Bono Services Provided by Private Practice Prosthodontists, the represented sample of U.S. prosthodontists excluded 11 states (Table 1), 6 of which are in the lowest quadripartite as far as per capita income.[6] In these states, although the demand for PBS may be greater, prosthodontists may not be able to afford as much charitable care. Second, as there was a separate cohort of prosthodontists providing PBS treatment, questions aimed at the status of charitable care were fielded by a smaller focus group than the initial 346 respondents, reducing the power of the sample. Last, using SM for

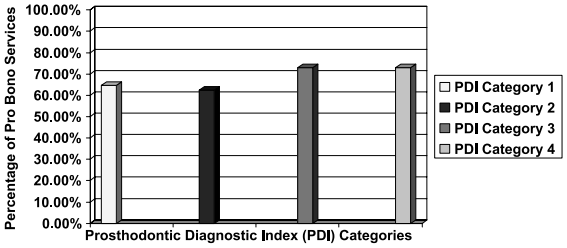

Figure 4 Pro bono services by PDI category.

the receipt and processing of all returned Internet surveys, conversion of survey responses from the mailed questionnaire to electronic data files, and finalization of data for review and tabulation was managed by the ACP, not an outside firm.

With these caveats in mind, this survey demonstrated that prosthodontists compare well with generalists and other specialists in providing PBS. The average monetary value of these annual services, the complexity of the dental treatment offered, and the attendant laboratory costs of prosthodontic services borne by the practitioner, all underscore the leadership role the specialty of prosthodontics is taking in the sphere of community service.

Conclusion

Based on this survey, practicing prosthodontists compare favorably to dental generalists and other specialists in terms of the annual dollar value donated in pro bono care. Their treatment addresses a broad scope of prosthodontic services, including the restoration of patients with complex needs.

Acknowledgments

The staff at the central office of the American College of Prosthodontists was essential to the survey process and tabulation of data.

References

1. Reingold D, Nesbit R: Volunteer Growth in America. Washington, DC, Corporation for National and Community Service, 2006, pp. 1-11
2. American Dental Association: 2006 Survey of Dental Practice, Income from Private Practice of Dentistry. Chicago, American Dental Association, 2008
3. McGarry TJ, Nimmo A, Skiba JF, et al: Classification system for partial edentulism. J Prosthodont 2002;11:181-193
4. McGarry TJ, Nimmo A, Skiba JF, et al: Classification system for complete edentulism. J Prosthodont 1999;8:27-39
5. Guichet DL: Moving your practice into the digital age. Dent Today 2008;27:90-94
6. United States Bureau of Census: The 2008 Statistical Abstract. Washington, DC, Government Printing Office, 2009