

Follow-up Survey of General Dentists to Identify Characteristics Associated with Increased Referrals to Endodontists

James F. Wolcott, DDS,* and Heidi Tarr Terlap, MPH[†]

Abstract

Introduction: A 2009 American Association of Endodontists survey of dentists in general practice (GPs) to assess their perceptions and understand the factors associated with referrals to endodontists was the first of its kind. The American Association of Endodontists repeated the survey in 2012 to update our understanding of the referral behavior of GPs by reexamining the effects of endodontist characteristics and professional behavior and the role of GP demographics and perceptions in determining referrals to endodontists.

Methods: Researchers conducted a cross-sectional study that included a quantitative online survey of 786 GPs in the United States (14% of 5737 initially opened invitations) from November 1–13, 2012. **Results:** Ninety-four percent of the GPs had positive perceptions of endodontists, but they referred only 43% of patients who required root canal treatment to endodontists. The perception that endodontists are partners in patient care and endodontic services are worth the cost was strongly related to the likelihood of referring ($P < .05$). GPs rated referring patients back for restorative treatment (95%, $n = 734$), timely follow-up of reports and images (94%, $n = 726$), and patient scheduling accommodation (91%, $n = 707$) as effective ways to build partnerships. Gender and years in practice moderated the relationships between several predictors (eg, communication, value of treatment, and expertise) and the likelihood of referring. **Conclusions:** There are concrete actions that endodontists can take and segments of the GP population that can be targeted to successfully address the issue of increasing referrals. However, examining the role of endodontist actions and GP perceptions and demographics is just the beginning in addressing the relationships involved in referral behavior. (*J Endod* 2014;40:204–210)

Key Words

Endodontists, general dentists, patient referrals, root canal treatment, survey

Past market research on United States adults has established that a majority of people (almost 9 of 10) would consider the advice of their general practice dentist (GP) when deciding between an extraction and root canal treatment (RCT) (1–3). Moreover, people get most of their information about endodontists from their GPs (1–3). Despite the importance of GPs in the referral decision, few studies have directly surveyed GPs about their perceptions of endodontists and factors that are associated with increased referrals to endodontists. Historically, studies have involved either surveying endodontists and exploring their perceptions of relationships with referring GPs (4, 5) or simply analyzing patient records to identify the demographic data and the clinical reasons for endodontic referral (6–8). Because of this dearth of research about the dynamics of the relationship between the GP, the patient, and the endodontist, in 2009 the American Association of Endodontists (AAE) Public and Professional Relations Committee (PPRC) commissioned a survey of general dentists to identify characteristics associated with increased referrals to endodontists (9). That particular study formed the basis of a comprehensive package of practice management tools and resources developed by the AAE. However, although the 2009 survey represented a first step in understanding the complex relationships involved in referral behavior, it was limited by data gathered at a single point in time. Subsequently, after 3 years the PPRC again conducted a survey to assess GPs' perceptions and behaviors related to referring patients to endodontists. The purpose of this study was to reexamine the effects of an endodontist's characteristics, professional behavior, and the role of GP demographics and perceptions on GP referral behavior. The null hypothesis was that there were no endodontist-related or GP-related factors or characteristics that were strongly related to the likelihood of GPs referring their patients to endodontists.

Methods

Researchers used the same protocol as in the 2009 study. To recap briefly, in 2009 researchers developed 7 hypotheses concerned with increasing GP referrals to endodontists that addressed factors and characteristics relevant to endodontists and GPs. The hypotheses were derived from earlier pilot studies that included secondary research of GP referrals to other specialists (10, 11), as well as GP focus group results.

The hypotheses included the following:

Referrals to endodontists will be increased if endodontists...

1. Maintain efficient communications and relationships with GPs
2. Interact well with patients
3. Provide and promote high-quality treatment
4. Consider promoting services to GPs in closest proximity

From *Private Practice, Santa Fe, New Mexico, and the University of Colorado Denver School of Dental Medicine, Aurora, Colorado; and [†]L. C. Williams and Associates Research Group, Chicago, Illinois.

Address requests for reprints to Dr James F. Wolcott, 539 Harkle Road, Suite C, Santa Fe, NM 87505. E-mail address: james@wolcottracing.com
0099-2399/\$ - see front matter

Copyright © 2014 American Association of Endodontists.
<http://dx.doi.org/10.1016/j.joen.2013.10.033>

Percentage of GPs' total patients who need root canals that they refer to endodontists in a typical year (Q1)

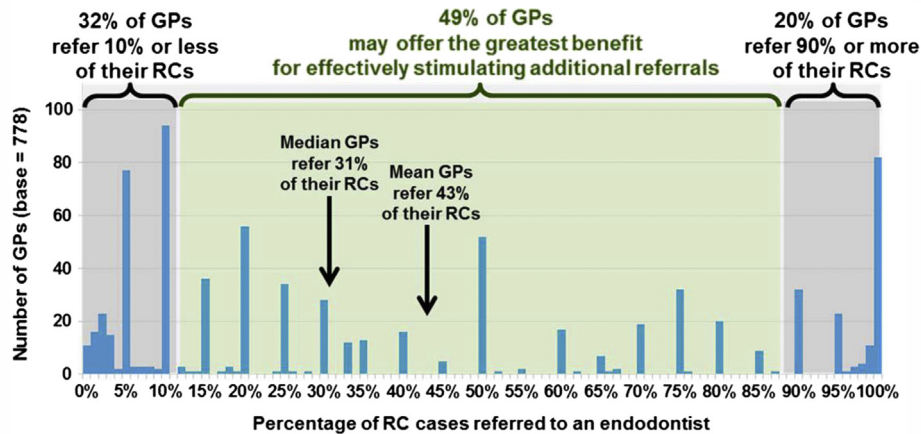


Figure 1. Percentage of GPs' patients who need root canals that they refer to endodontists in a typical year (Q1).

Referrals to endodontists will be increased if GPs...

5. Believe endodontists have more skills/expertise
6. Have certain demographic characteristics (eg, female GPs are more likely to refer to other specialties such as periodontists)
7. Perceive the value of endodontist services as greater than the additional cost

Researchers conducted a cross-sectional study that included a quantitative online survey of GPs in the United States from November 1–13, 2012. The hypotheses served as the foundation for questions on the quantitative survey (Supplemental Table S1 is available online at www.jendodon.com); each hypothesis was represented by 1 or more quantitative survey items. The Web-based survey (programmed by using Qualtrics [Provo, UT]) included both categorical and 5-point, Likert-style questions to facilitate the analysis of both group differences and predictive relationships.

The survey link was delivered via an e-mail blast to an opt-in list of 56,009 GPs nationwide. The e-mail was sent on November 1, 2012 by Advanstar Marketing Resource Network (<http://www.marketing.advanstar.info>) and was opened by 5737 GPs. On November 7, a reminder e-mail was delivered to the 51,295 initial recipients who had not opened the first e-mail and those who did not opt out after receiving it; 4340 GPs opened the reminder e-mail. The survey remained active through November 13.

Those who clicked on the survey link indicated their consent to participate. GPs had an opportunity to enter their name in a drawing for 1 of 2 gift cards as an incentive to participate; however, names and contact information were kept separate from survey responses to ensure confidentiality. No attempt was made to contact nonrespondents after the November 13 deadline.

As in 2009, researchers used SPSS 15.0 (SPSS Inc, Chicago, IL) (<http://www.spss.com>) software to analyze data in several steps. Initially, descriptive statistics (frequencies and means) were used to summarize overall results and inferential statistics (χ^2 tests, independent sample *t* tests, and analysis of variance tests) to identify statistically significant differences ($P < .05$) within demographic groups. Next, researchers used correlation analysis to examine associations between predictors and the dependent variable: "I'm likely to refer to an endodontist in the future." Overall and within-group predictors highly correlated with the dependent variable via standard linear regression analysis for evaluation of assumptions were then identified. Finally, to

detect meaningful differences ($P < .05$) between 2009 baseline results and 2012 results, statistical tests (*t* test for differences in means and χ^2 test for differences in percentages) were performed.

Results

Of the 5737 GPs who opened the e-mail initially, 786 GPs completed the survey for a 14% response rate. The margin of error was ± 3.5 percentage points ($P < .05$). GP respondents represented a variety of areas and regions within the United States. Akin to the 2009 survey, GP respondent practice location was divided among small cities (31%, $n = 241$), larger cities (23%, $n = 181$), and large metropolitan areas (32%, $n = 247$). Fewer respondents indicated their practice was located in a rural area (14%, $n = 112$). Just as in 2009, GP practice location represented all regions of the United States including the Northeast (20%, $n = 139$), North Central (26%, $n = 181$), South (32%, $n = 221$), and West (22%, $n = 155$). Although men (79%) remain a large majority of the GPs, there has been a significant increase in women (21% compared with 17%) since the 2009 survey.

Overall Results

As in 2009, GPs overwhelmingly have positive perceptions of endodontists; most have a very positive perception, with a large majority (94%, $n = 738$) of respondents rating endodontists positively (a 4 or 5 rating on a 5-point scale). In fact, more than 9 in 10 GPs (92%, $n = 713$) agreed they were likely to refer patients to endodontists in the future. Still, GPs reported that on average, they referred less than one-half (43%; mean, 42.77; standard deviation [SD], ± 35.55) of their patients who needed RCT to endodontists during a typical year of practice (Fig. 1). A majority of GPs (64%, $n = 502$) said they routinely refer patients to 2 or 3 endodontists (38%, $n = 297$; 26%, $n = 205$, respectively), all of which represents no significant change from the 2009 results. A new item was included in the current survey; a high percentage of GPs (78%, $n = 610$) agrees that endodontic treatment of a salvageable tooth would provide an equal or preferable outcome to an extraction and dental implant.

Factors about endodontists remain important to a high percentage of GPs, including being satisfied with their previous work and having the needed skills/expertise (both 97%, $n = 759$ and $n = 751$, respectively). Two factors have increased in statistical significance compared with 2009, having the most up-to-date equipment and technology to perform

Download English Version:

<https://daneshyari.com/en/article/3146897>

Download Persian Version:

<https://daneshyari.com/article/3146897>

[Daneshyari.com](https://daneshyari.com)