

A Practice Profile of Board Certified Pediatric Dentists Based upon Characteristics of the Dental Home

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Abstract: *Purpose:* This study's purposes were to: (1) develop a practice profile of board certified pediatric dentists based upon the characteristics of the dental home; and (2) suggest a construct for an index that could assist in the determination of the existence of a dental home. **Methods:** A survey was conducted of American Board of Pediatric Dentistry diplomates. Questions were asked that profiled practices based on the 7 characteristics of a dental home: (1) accessibility; (2) family centered; (3) continuous; (4) comprehensive; (5) coordinated; (6) compassionate; (7) culturally competent. **Results:** Seventy-five percent of respondents were knowledgeable about the dental home and reported that they regularly apply the concept in practice; 95 percent believed that it is important for a practice to function as a dental home. A dental home assessment tool was thought to be potentially useful by 72 percent of respondents. While 73 percent said a dental home cannot exist independently of a specific dental office, academic/public health respondents were more likely to respond that it could. **Conclusions:** Participants' variability in responses suggests that functional criteria associated with the 7 characteristics of a dental home would be helpful in determining the success of providing a dental home. A potential construct for a dental home index was suggested. (*Pediatr Dent* 2009;31:) Received July 8, 2009 | Last Revision August 5, 2009 Revision Accepted September 16, 2009

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In 2002, the introduction of the concept of a dental home initiated a professional discussion about the definition of a dental home and the characteristics of practices that intend to function as a dental home.¹ The dental home is based on the American Academy of Pediatrics' (AAP) concept of the medical home.² Nowak and Casamasimo have identified 7 practice characteristics foundational to functioning as a dental home: accessibility, family centered, continuous, comprehensive, coordinated, compassionate, and culturally competent.¹ Currently, there are no studies of how these dental home characteristics are being met in the practice of pediatric dentistry or what criteria might be utilized to make such a judgment.

Dental practice dimensions that would assist in determining whether or not the characteristics of a dental home are being addressed should include: access to emergency care, appointment availability, access to care for children with special health care needs (SHCN), behavior management, informed consent, parental involvement, accommodation to cultural barriers, community involvement, transfer protocols, referral protocols, and interaction with other health care professionals.

The initiative by the profession to implement the concept of a dental home for children makes it important to understand the manner in which dentists manage their practices relative to activities associated with characteristics of a dental home. Such an understanding will facilitate the development of criteria that can be used in assessing whether or not the 7 characteristics of a dental home are met. While past surveys have assessed some of these topics individually, a comprehensive survey focused on practice dimensions relevant to a dental home has not been conducted.²⁻⁷

The purpose of this study was to develop a profile of the practices of board certified pediatric dentists based upon the characteristics of the dental home, with the further goal of suggesting a potential construct for a dental home index to evaluate the existence of a dental home.

Methods

A cross-sectional survey was conducted by American Board of Pediatric Dentistry (ABPD) diplomates. This population was selected because the public perceives board certification as a measure of health care quality, competence, and expertise.^{8,9} Although non-board certified pediatric dentists practice at a high level of quality,¹⁰ using board certified pediatric dentists offered a smaller, more focused, study population. All 1,721 ABPD diplomates with e-mail addresses were invited to participate in the survey.

The research and survey methodology was approved by the Institutional Review Board of the Office of Research

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Integrity, University of Kentucky, Lexington, Ky. A 34-item survey was developed based on the 7 aforementioned characteristics of the dental home. The survey was pilot tested with 2 different groups of board certified practitioners (N=14). The first group consisted of individuals recognized as leaders in the specialty and actively involved in clinical practice. The second group included clinicians who serve as part-time faculty members at the University of Kentucky. Based upon recommendations of these 2 groups, revisions were made to questions and response options. The questionnaire assessed practice features of pediatric dentists identified by these 2 groups as relating to the 7 characteristics of the dental home.

E-mail addresses of board certified pediatric dentists were obtained from the American Academy of Pediatric Dentistry (AAPD). The survey was distributed via Survey Monkey, a commercially available online survey tool. Participants were invited to participate after being advised of the study's purpose and objectives. Prior to beginning the survey, all participants read the AAPD definition of the dental home. No follow-up e-mails were sent to nonrespondents. Participants who did not complete the entire survey were not included in the analysis.

Continuous variables were summarized with descriptive statistics (numbers, means, medians, and standard deviations). No differences between academic and public health respondents were observed. Therefore, the results were collapsed into a combined category: academic/public health. Categorical variables were described with counts and percentages. Comparisons between private and academic public health respondents were conducted with chi-square tests and 2 group *t* tests for categorical and continuous outcomes, respectively. All statistical analyses were performed using SAS 9.1 (SAS Institute, Inc, Cary, NC), and *P*-values <.05 were considered statistically significant. Reported *P*-values were calculated comparing those dentists who practice in the private sector vs. the public sector of academic and public health pediatric dentists.

Results

The survey response rate was 24 percent (N=417), with participants reporting a median of 13 years of practice. Most respondents (78%) were in private practice, with the remainder in the public sector of academics (13%) and public health (7%).

When asked about knowledge of the dental home, 75 percent of all respondents were knowledgeable and reported that they regularly applied the concept of the dental

home in practice. The overwhelming majority of respondents (95%) believed that it is important for a practice to function as a dental home. A dental home assessment tool was thought to be potentially useful by 72 percent of respondents. Asked if a dental home can exist for a child independent of being a patient of record at one particular office, 73 percent of all respondents recorded "no." Academic/public health respondents, however, were significantly more likely to respond

Table 1. RESPONSES TO QUESTIONS ASSOCIATED WITH ACCESSIBLE CARE

	Total N (P)	Private N (%)	Academic/other N (%)
	417 (100)	329 (79)	88 (21)
Emergency care is available 24 hours/day, 7 days/week			
Yes	384 (93)	309 (94)	75 (87)
No	30 (7)	19 (6)	11 (13)
Percent of patients with special care needs*			
<10	206 (52)	180 (57)	26 (31)
10-25	165 (41)	129 (41)	36 (43)
>25	29 (7)	7 (2)	22 (26)
Acceptable forms of payment			
Fee-for-service	390 (94)	323 (98)	67 (76)
Private insurance	377 (90)	305 (93)	72 (82)
State Children's Health Insurance Program*	198 (48)	136 (41)	62 (71)
Medicaid*	250 (60)	175 (53)	75 (85)
Despite changes in family's financial status (ie, private insurance to Medicaid, unemployment, etc.):			
Original plan of dental care continues	262 (63)	205 (62)	57 (65)
Patient is kept out of pain	178 (43)	146 (44)	32 (36)
Alternate treatment plan offered	122 (29)	105 (32)	17 (19)
Care postponed	61 (15)	52 (16)	9 (10)
Length of time to schedule a new patient exam*			
1-2 wks	213 (52)	190 (58)	23 (27)
3-4 wks	155 (38)	110 (34)	45 (52)
≥3 mos	45 (11)	27 (8)	18 (21)
Length of time to schedule a restorative appointment*			
1-2 wks	191 (46)	166 (51)	25 (29)
3-4 wks	198 (48)	148 (45)	50 (58)
≥3 mos	24 (6)	13 (4)	11 (13)
Office is handicapped accessible			
Yes	394 (98)	313 (99)	81 (96)
No	6 (2)	3 (1)	3 (4)

* *P*<.05.

“yes” than private practice respondents (41 percent vs. 23 %, $P<.001$).

Accessible care. Responses to questions related to accessibility are found in Table 1. Ninety-four percent of private practice respondents reported having emergency care available 24 hours a day vs 87 percent of academic/public health respondents. Academic/public health respondents were more likely than private practitioners to accept both Medicaid (85% vs. 53 %, $P<.001$) and State Children’s Health Insurance Program (S/CHIP; 71 percent vs. 41 percent, $P<.001$).

Eighty-nine percent of practices could schedule a new patient examination within 3 to 4 weeks, and 94 percent could schedule a restorative appointment within 3 to 4 weeks. An appointment for both a new patient examination ($P<.001$) and restorative appointment ($P<.001$) was able to be scheduled more rapidly in private offices vs. academic/public health practices.

There was a significant difference between the academic/public health and private respondents ($P<.001$) in the percentage of SHCN patients treated in their respective practices. Two percent of private respondents reported that more than 25 percent of their patients had SHCN vs. 26 percent of academic/public health respondents, who reported that more than 25 percent of their SHCN patients. Ninety-eight percent of respondents reported that their offices were physically accessible for SHCN children.

Family centered care. Answers to questions associated with being family centered are found in Table 2. Ninety-four percent of respondents conducted a consultation with the parent/guardian to explain and justify planned treatment and gained an informed consent. Seventy-nine percent of respondents reported always discussing potential behavior management techniques prior to treatment, and 80 percent reported always discussing how the child behaved during the treatment after the appointment was completed. There were no significant differences between private practice and academic/public health respondents on these 3 questions. When asked if parental compliance with oral home care instruction is monitored routinely, only 63 percent of all respondents reported that compliance is always or frequently monitored.

Continuous care. Data reporting whether or not practices provided continuous care are found in Table 3. No formal transition process to adult care for children was reported by 23 percent of respondents. Thirty-five percent of respondents provided a list of general dentists with whom care could be continued. Twenty-nine percent of respondents directly referred patients through a formal transition process. Most practitioners (70 percent) reported periodic re-evaluation (recall) being based on a time interval individualized to the patient’s specific needs. Thirty percent, however, reported adhering to the traditional 6-month interval. Academic/public health respondents were more likely to have participated in a community based prevention program (60% vs. 32%, $P<.001$) and a screening and referral program (71% vs. 56% $P<.02$) vs private practice respondents.

Comprehensive care. Respondents’ answers to questions of comprehensiveness are found in Table 4. Eighty-six percent of practices reported having an infant oral health program. Dietary counseling and anticipatory guidance were routinely provided by 84 percent of respondents. While pediatric dentists provided a wide range of services, only 55 percent of all respondents reported routinely documenting a caries risk assessment. A higher percentage (66%) routinely conducted a caries risk assessment for SHCN children. Academic/public health respondents were more likely than private practitioners to routinely conduct a caries risk assessment for both healthy patients (73% vs. 51%, $P<.001$) and SHCN patients (80% vs. 62%, $P>.007$). Seventy-six percent of private practice respondents reported that fewer than 50 percent of emergency patients subsequently

TABLE 2. RESPONSES TO QUESTIONS ASSOCIATED WITH FAMILY-CENTERED CARE

	Total N (%)	Private N (%)	Academic/other N (%)
	417 (100)	329 (79)	88 (21)
Do you or a member of your staff conduct a consultation with the parent/guardian to explain and justify your planned treatment (ie, gain an informed consent to begin treatment)?			
Always	384 (94)	306 (94)	78 (93)
Frequently	15 (3)	10 (3)	5 (6)
Sometimes	9 (2)	8 (2)	1 (1)
Never	1 (1)	1 (1)	0 (0)
Prior to treatment, do you or a member of your staff discuss with the parent/guardian how you propose to manage the child’s behavior?			
Always	323 (79)	257 (79)	66 (79)
Frequently	65 (16)	49 (15)	16 (19)
Sometimes	19 (4)	17 (5)	2 (2)
Never	2 (1)	2 (1)	0 (0)
After an appointment, do you or a member of your staff discuss with the parent/guardian how their child behaved during treatment?			
Always	330 (81)	269 (82)	61 (73)
Frequently	58 (14)	39 (12)	19 (22)
Sometimes	20 (4)	16 (5)	4 (5)
Never	1 (1)	1 (1)	0 (0)
Does your practice monitor and document parental compliance with oral home care instructions?			
Always	109 (27)	85 (27)	24 (29)
Frequently	143 (36)	112 (35)	31 (37)
Sometimes	117 (29)	95 (30)	22 (26)
Never	33 (8)	26 (8)	7 (8)

sought comprehensive care vs 40 percent of academic/public health respondents ($P<.001$).

Essentially all practitioners routinely or occasionally utilized the common behavior management approaches of tell-show-do, voice control, and passive restraint. Seventy-six percent routinely or occasionally utilized protective stabilization (a papoose board). Nitrous oxide was routinely or occasionally used by 95 percent of practitioners. Seventy percent routinely or occasionally used oral sedation. Only 26 percent, however, used intravenous sedation. General anesthesia was utilized routinely or occasionally by 80 percent of respondents (Table 5).

Coordinated care. Coordinated care data are found in Table 6. Academic/public health respondents were more likely to have an ongoing working relationship with pediatric health professionals in the social (66% vs. 35%, $P<.001$) and mental (53% vs. 20%, $P<.001$) health fields vs respondents in private practice. Only 28 percent of respondents reported regularly educating pediatricians and family practice physicians in their community about issues related to oral health.

When referring children outside the office for care by other dental specialists, private practice respondents were more likely than academic/public health dentists to directly provide patients with specialist information (74% vs. 48%, $P<.001$). Most respondents (55%) rely on e-mail and/or traditional written correspondence for monitoring patients who have been referred outside the office to ensure adequate coordination and completion of treatment. Twenty-six percent of respondents, however, had no formal mechanism in place.

Compassionate care. Questions and responses to compassionate care are found in Table 7. When a patient is unable to pay a professional fee for emergency treatment, 31 percent reported treating the patient for a reduced fee, and 21 percent provided care for no fee. Pediatric dentists in academic/public health settings were significantly more likely to provide a less expensive, alternative treatment plan when a negative change in financial status of a family occurred (81% vs. 68%, $P=.02$).

Culturally competent. Table 7 contains responses to questions about culturally competent care. Essentially all respondents (99%) reported recognizing, valuing, and respecting children's cultural background. Academic/public health respondents were more likely to have a mechanism in place for communicating ongoing care for pa-

tients of varying cultural backgrounds (77% vs. 43%, $P<.001$). Most respondents (54%) reported having a language translator on site. Academic/public health practitioners, however, were significantly more likely than private practitioners to do so (75% vs. 48%, $P<.001$). Thirty-eight percent of respondents reported providing literature in the patient's primary language. Again, however, academic/public health practitioners were significantly more likely than private practitioners to do so (52% vs. 34%, $P>.001$).

Discussion

Adopted in 2006, the AAPD's definition of a dental home states: "The dental home is the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family centered way. Establishment

TABLE 5. RESPONSES TO QUESTIONS ASSOCIATED WITH CONTINUOUS CARE

	Total N (%)	Private N (%)	Academic/other N (%)
	417 (100)	329 (79)	88 (21)
When the times comes for a patient to be transitioned to an adult general practice:			
Direct referral, and formal transition is made to a particular adult general practice	118 (29)	98 (31)	20 (24)
A list is provided, patient schedules with whom them please	142 (35)	113 (35)	29 (35)
No formal process in place to assist transition	91 (23)	73 (23)	18 (21)
Patients stop coming after a certain age, no follow-up is pursued	12 (3)	7 (2)	5 (6)
Other	41 (10)	29 (9)	12 (14)
Periodic re-evaluation (recall) is based on:			
Traditional 6-month interval for all children	121 (30)	102 (32)	19 (23)
Time interval is individualized to the patient's specific needs	281 (70)	216 (68)	65 (77)
Participation in community-based/educational programs			
Community education programs	342 (82)	274 (83)	68 (77)
Fundraising to improve access and education	120 (29)	97 (30)	23 (26)
Community-based screening/referral program*	246 (59)	184 (56)	62 (71)
Community-based prevention programs*	159 (38)	106 (32)	53 (60)
Other	15 (4)	13 (4)	2 (2)
No participation	28 (7)	23 (7)	5 (6)
Do you educate pediatricians and family medicine physicians in your community about issues related to oral health?			
Regularly	112 (28)	83 (27)	29 (35)
Occasionally	252 (64)	201 (64)	51 (61)
Never	32 (8)	29 (9)	3 (4)

* $P<.05$.

of a dental home begins no later than 12 months of age and includes referral to a dental specialist when appropriate."¹² First introduced in the *Journal of the American Dental Association* in 2002, the dental home concept has been adopted as an AAPD policy.¹³ Based on the American Academy of Pediatrics' concept of a medical home, the dental home was advocated as a means of providing patient-centered care, focusing primarily on early prevention.¹ Similar to the medical home, centralizing care through a home would allow for better coordination of preventive, comprehensive oral health care for children.

While the dental home is a policy relevant for all children, those characterized as at high risk for oral disease, and requiring coordination of care to ensure comprehensiveness, are most in need of a dental home.¹⁴ The impetus for the development of the medical home was the need for better coordination of care to ensure comprehensive care for children

at high risk for oral health problems, specifically SHCN children. As outlined in the AAP's oral risk assessment and timing and establishment of the dental home, these children include: SHCN children; children of mothers with a high caries rate; children with demonstrable caries, plaque, demineralization, and/or staining; children who sleep with a bottle or are breast-fed throughout the night; later order offspring; and children in families of low socioeconomic status.¹⁴ The children most often seen and/or referred to pediatric dentists are these children at the highest risk. These are primarily the children for whom the dental home concept was advocated.

Considerable variation was identified in the practice features of surveyed pediatric dentists, with the result that not all practices were able to meet all of the characteristics of a dental home, to the extent that those characteristics were adequately assessed in the survey questions posed. This should not be surprising, as practice profiles will differ based on the practitioner's skills and orientations and the practice's environment. These factors result in practices serving patient populations with differing oral health needs. The identified differences in practice strategies between private practitioners and academic/public health respondents serve as an example of how environmental circumstances alter pediatric dentists' practice profiles and influence their ability to meet all of the characteristics of a dental home.

This survey profiled practice features of pediatric dentists that were considered relevant to the 7 foundational characteristics of a dental home. While most questions associated with the dental home characteristics of accessibility, family centeredness, compassion, and cultural competency demonstrated collective agreement, questions pertaining to the characteristics of coordination, continuity, and comprehensive care were more variable. For example, a number of practices lacked: a formal referral process (16%); referral follow-up (26%); formal transition to adult oral care (22%); routine caries risk assessment (45%); and recall appointments based on individual needs (30%). These deficiencies highlight the challenges of providing and maintaining a dental home.

Primary to a dental home is ensuring that a child's primary preventive and therapeutic needs are met, and all additional oral health care that is required is coordinated to ensure comprehensiveness. Not infrequently, parents and children are inadequately assisted in navigating the complex and confusing referrals from one dentist to another or to other health professionals. Medicine emphasizes the importance of patient-centered and comprehensive care through the medical home; dentistry can do the same by establishing a dental home. As this survey suggests, however, this is challenging and cannot always be accomplished by one individual or one particular practice. Therefore, a broadening of the understanding of the dental home is necessary so that it can be conceptualized as a functional entity and not only or simply a physical one.

Most survey respondents (73%) believed that children cannot have a dental home if they are not the patient of a specific practice. Twenty-seven percent of respondents, however, believed that a dental home could exist for a child independent of belonging to a particular practice. The majority

Table 4. RESPONSES TO QUESTIONS ASSOCIATED WITH COMPREHENSIVE CARE

	Total N (%)	Private N (%)	Academic/other N (%)
Your practice provides the following services:			
Anticipatory guidance			
Routinely	339 (85)	266 (84)	73 (87)
Occasionally	58 (15)	48 (15)	10 (12)
Never	3 (1)	2 (1)	1 (1)
Documented caries risk assessment			
Routinely*	221 (55)	160 (51)	61 (72)
Occasionally	137 (34)	117 (37)	20 (24)
Never	42 (11)	39 (12)	3 (4)
Documented caries risk assessment for children with special health care needs is provided:			
Routinely *	260 (66)	194 (62)	66 (79)
Occasionally	96 (24)	82 (26)	14 (17)
Never	40 (10)	37 (12)	3 (4)
Does your practice have an infant oral health care program?			
Yes	336 (86)	261 (85)	75 (90)
No	53 (14)	45 (15)	8 (10)
Percent of emergency patients who subsequently seek comprehensive care*			
None	1 (1)	1 (1)	0 (0)
<10	28 (7)	25 (8)	3 (4)
10-25	51 (13)	22 (7)	29 (35)
25-50	47 (12)	29 (9)	18 (22)
50-75	97 (24)	81 (26)	16 (19)
>75	172 (43)	155 (49)	17 (20)

* P<.05.

of these practitioners were from the academic/public health community. There is a tension between understanding a dental home as a physical place and understanding it as a functional concept. While it is possible that a dental home can exist in a specific practice location, it is also possible to understand the concept functionally—that is, as an administrative entity. The AAPD's policy on the dental home states: "The dental home is inclusive of all aspects of oral health that result from the interaction of the patient, parents, nondental professionals, and dental professionals."¹³ Thus, the concept of a dental home focuses on the functional interaction among the parents, child, and health professionals.

Conceptually, a child's relationship with a primary care dentist is basic to a dental home. The primary care dentist, however, does not necessarily have to be the dental home. The dental home may be a functional, administrative entity participated in by the primary care dentist as well as other health professionals. Some confusion likely exists as a result of the term "home" itself, as a home is perceived as a physical structure. But, as the often expressed aphorism suggests, "a house (physical structure) is not a home." The AAPD policy on the dental home does not state that a dental home exists for a child only if the child is associated with a specific practice.

A dental home can be understood as a "virtual" concept consisting of a network of health care professionals who collaborate to meet a child's oral health needs, regardless of whether the child "belongs" to a particular dental practice. Glassman has described a "virtual" understanding of the dental home in working with alternative practice dental hygienists in California.¹⁶ Such a virtual or functional understanding of a dental home makes it more practical for the 7 foundational characteristics of a dental home to be met, as multiple health professionals can participate in addressing the needs of a specific child. Iowa has an initiative, mandated by legislation, to establish a dental home for all children who receive public financing of their dental care.¹⁷ The "I-Smiles" initiative seeks to develop a functional dental home, one that is "virtual." Twenty-four dental hygienists work as regional "I-Smiles" coordinators to provide care coordination, oversee referrals to ensure comprehensiveness, and act as liaisons for families with community organizations and health care professionals.

The Oral Health Bureau of the Iowa Department of Public Health identifies its dental home as consisting of health care professionals, including dentists, dental hygienists, dental assistants, physicians, physician assistants, nurse practitioners, nurses, and dietitians. The Iowa virtual dental home is "located" in dental offices, medical offices, community health centers, and public health settings.

The American Dental Association has developed the concept of a "community dental health coordinator" to help address the access to care issue for children. Such a community health worker could be understood as an individual responsible for administratively orchestrating a dental home for children.¹⁸

Given the need to integrate and coordinate all health care for children, particularly children at risk for health problems, it is interesting to reflect on an integration of the concepts of a medical home and dental home. Considerable emphasis has

been placed on promoting the age 1 dental visit to establish a relationship with a dentist early, primarily to identify children who are at high risk for oral disease and to intervene with preventive strategies. Prior to this advocated age 1 dental visit, however, the child has been seen multiple times by a health professional caring for his or her general health, typically a pediatrician or family practice physician.

Given that oral health care is only one aspect of overall health care, it would seem reasonable that the dental home should actually be a dimension of the medical home; a room within such a home, to extend the metaphor. In a virtual "health" home, a person or organizational entity, working with all members of the health care team, could serve as the coordinator of all health care to ensure that patient-centered, coordinated, comprehensive health care is provided. Dentists would provide the required oral health care, but would not necessarily be the primary coordinator of health care for the

TABLE 5. BEHAVIORAL MANAGEMENT TECHNIQUES USED

	Total N (%)	Private N (%)	Academic/other N (%)
	417 (100)	329 (79)	88 (21)
Protective stabilization			
Routinely	47 (11)	31 (10)	16 (19)
Occasionally	262 (64)	201 (62)	61 (73)
Never	96 (24)	90 (28)	6 (7)
Referred	1 (1)	0 (0)	1 (1)
Nitrous oxide			
Routinely	264 (65)	222 (69)	42 (50)
Occasionally	119 (29)	84 (26)	35 (42)
Never	19 (5)	16 (5)	3 (4)
Referred	4 (1)	0 (0)	4 (4)
Oral sedation			
Routinely	104 (26)	85 (27)	19 (22)
Occasionally	179 (44)	139 (43)	40 (48)
Never	98 (24)	84 (26)	14 (17)
Referred	25 (6)	14 (4)	11 (13)
IV sedation			
Routinely	21 (5)	17 (5)	4 (5)
Occasionally	86 (21)	74 (23)	12 (14)
Never	256 (63)	204 (63)	52 (62)
Referred	43 (11)	27 (8)	16 (19)
General anesthesia			
Routinely	132 (33)	90 (28)	42 (50)
Occasionally	192 (47)	161 (50)	31 (37)
Never	30 (7)	29 (9)	1 (1)
Referred	52 (13)	42 (13)	10 (12)

TABLE 6. RESPONSES TO QUESTIONS ASSOCIATED WITH COORDINATED CARE

	Total N (%)	Private N (%)	Academic/other N (%)
	417 (100)	329 (79)	88 (21)
Have a working relationship with pediatric health professionals in the following fields:			
Medical	381 (91)	300 (91)	81 (92)
Social*	173 (42)	115 (35)	58 (66)
Mental *	113 (27)	66 (2)	47 (53)
When a patient is referred outside the office for treatment:			
A phone call is made and appointment scheduled through your office	197 (47)	157 (48)	40 (46)
A formal letter of referral is mailed	135 (32)	105 (32)	30 (34)
Written letter of referral is given to the parent	211 (51)	178 (54)	33 (38)
Specialist contact information given to parent; parent makes appointment*	284 (68)	242 (74)	42 (48)
Methods utilized to monitor and coordinate completion of treatment for patients referred outside the practice¹			
You maintain a comprehensive list and contact parents regularly	51 (12)	41 (13)	10 (11)
Phone conversation between dental professionals	181 (43)	154 (47)	27 (31)
You rely on e-mails and/ or traditional written correspondence	213 (51)	175 (53)	38 (43)
No formal mechanism	108 (26)	80 (24)	28 (32)
Parents responsibility	143 (34)	113 (34)	30 (34)

TABLE 7. RESPONSES TO QUESTIONS ASSOCIATED WITH COMPASSIONATE AND CULTURALLY COMPETENT CARE

	Total N (%)	Private N (%)	Academic/other N (%)
	417 (100)	329 (79)	88 (21)
Compassionate			
<i>If a parent is unable to pay a professional fee for emergency care:</i>			
You treat the patient for a reduced fee	120 (30)	95 (30)	25 (31)
You reschedule until they can pay	3 (1)	3 (1)	0 (0)
You examine the patient but do not treat	13 (3)	13 (4)	0 (0)
You refer (ie, another practice, hospital)	28 (7)	24 (8)	4 (5)
No charge	81 (21)	60 (19)	21 (26)
Culturally competent care			
<i>Does your practice have a mechanism in place for communication and ongoing care for patients of various cultural backgrounds?</i>			
Yes*	195 (50)	132 (43)	63 (77)
No	196 (50)	177 (57)	19 (23)
<i>Cultural barriers, including language, are addressed in communication via:</i>			
Translator on site*	223 (53)	157 (48)	66 (75)
Electronic translation service	49 (12)	24 (7)	25 (28)
Literature in patient's primary language*	158 (38)	112 (34)	46 (52)
Picture book	79 (19)	59 (18)	20 (23)

* P<.05.

child. As an extension of the medical home, the dental home would not attempt to function as a separate entity, but would rather serve as an extension of a health home. This expanded concept of a health home would be particularly appropriate for SHCN children, the children for whom the medical home was originally developed.

The AAP developed a medical home index to provide a means of making a point-in-time determination of "medical homeness," and provide guidance for benchmarking and quality improvement strategies.¹⁹ To date, a complementary dental home index has not been developed. The introduction of such an index would significantly advance the development of the dental home concept and provide key criteria that could be utilized to determine "dental homeness." Respondents overwhelmingly acknowledged that such an index would be helpful in assessing the extent to which they participate in a dental home.

Given that there are significant (and understandable) differences among practitioners, creating an index that is able to evaluate the existence of a dental home is challenging. It becomes even more so considering that the concept of a dental home is not one for pediatric dentists alone, but for general dentists, who provide care for the largest number of America's children. The current literature regarding the characteristics of a dental home specify elements of an optimal care process, but offer limited guidance in terms of practical application.

A construct for a potential dental home index is proposed in the Table 8. It represents a set of objective criteria that would be operational in a dental home. Each of the 21 criteria is associated with 1 of the 7 dental home characteristics. In developing this construct, the lack of literature and research posed a problem identifying objective criteria associated with each of the characteristics. Criteria were developed both as a result of consultation with national experts and as guidelines set forth in the dental and medical literature. The proposed construct for an index is not meant to be a finalized set of criteria, but rather to serve as a basis for further discussion as to what actually constitutes a dental home and the eventual development of a reliable, validated dental home index, comparable to the medical home index.

Conclusions

Based on this study's results, the following conclusions can be made:

TABLE 3. PROPOSED CONSTRUCTION OF A DENTAL HOME INDEX

Accessible care

- Urgent care is available/coordinated 24 hours a day, 7 days a week.
- Care is provided/coordinated for patients with special health care needs.
- Public and private insurance is accepted and changes in coverage are accommodated.
- Appointments can be scheduled within a month.
- Facility where care is provided is handicapped accessible.

Family centered care

- Effective communication exists with parent/guardian to gain valid informed consent.
- Appropriate role of parent/guardian participation in oral health care is established and monitored.

Continuous care

- Assistance is provided with transition to adult general dental care.
- Effective protocol exists for periodic re-evaluation and treatment, ensuring continuity of care for the child from infancy through adolescence.
- Oral health in the community is promoted through community education programs and participation in initiatives to improve access to care.

Comprehensive care

- Individualized anticipatory guidance and oral health education is provided.
- Full range of preventive and therapeutic care, based upon an individualized dental disease risk and developmental assessment, within the profession's standards of care.
- Parents who present their child(ren) for urgent care are encouraged to pursue comprehensive care.
- Strategies for managing behavior to ensure safe and effective care are either provided or coordinated when advanced techniques are required.

Coordinated care

- There are collaborative relationships with health professionals in medical, social, and mental health disciplines.
- Specialty oral health care among multiple professionals (eg, pediatric dentists/orthodontists/endodontists) is coordinated.
- A child's dental record is readily accessible to all participating health professionals.

Compassionate care

- Empathic relationship is established with each child, as well as parent/guardian.
- Urgent care is not denied due to inability to pay.

Culturally competent care

- Cultural values are acknowledged and integrated into the delivery of care.
- A mechanism is in place for communication/coordination to optimize care for patients of various cultural backgrounds.

1. Respondents varied in their answers to questions associated with features of clinical practice that relate to the 7 characteristics of the dental home.
2. This variability suggests the need for objective measures to access and evaluate the existence of a dental home for a child.
3. A dental home index, similar to the medical home index, which specifies functional criteria associated with the 7 characteristics, would be helpful for health professionals who assume responsibility for the oral health of children to determine to what extent they achieve the goal of providing a dental home.
4. A dental home index is important to provide such objective measures, and a potential construct for one is suggested.
5. It is suggested, however, that a health home, a functional integration of a medical and dental home—a virtual health home concept— might best serve the goal of providing a child-centered, coordinated, comprehensive approach to overall health care for a child.

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