

Dental Practice-Based Research Network www.DentalPBRN.org

DPBRN 20: Infrastructure Update Survey

Results: Overall and by Region

Date prepared: October 13, 2011

Table A: Respondents by DPBRN region

				Ot	her			Mi	dwest/				
 AL,	/MS	FL/GA		Southeast F		PDA	PDA/West Nortl		Northeast		SK	TO	TAL
N	%	N	%	N	%	N	%	N	%	N	%	N	%
 290	39.8	166	22.8	51	7.0	53	7.3	89	12.2	80	11.0	729	100

¹AL/MS: Alabama/Mississippi; FL/GA: Florida/Georgia; Other southeast: 37-NC, 9-SC, 3-TN, 1-TX, 1-VA;

Report below is based on 729 respondents; 73.6% of the 991 practitioners invited.

"Total" columns not summing to 729 are due to missing data.

Data collection for this study began December 9, 2010 and ended June 9, 2011.

Section 1: About your practice and your patients

1. Which category best describes your practice?

- a. Solo private practice (only one dentist in the practice)
- b. Group private practice (more than one dentist)
- c. HealthPartners Dental Group or Permanente Dental Associates
- d. Public health practice, community health center, or publicly-funded clinic
- e. Academic setting
- f. Other, please specify: _

Table Q1: Practice Description by DPBRN region

					0	ther			Mid	west/				
	AL,	/MS	FL/	/GA	Sou	theast	PDA/West		Northeast			SK	TOTAL	
	Ν	%	Ν	%	N	%	N	%	N	%	Ν	%	Ν	%
Which category best des	scribes	your p	ractic	e?										
Solo private	203	70.0	110	66.3	31	60.8	2	3.8	17	19.1	4	5.0	367	50.3
Group private	70	24.1	48	28.9	17	33.3	6	11.3	28	31.5	48	60.0	217	29.8
Health Partners group	0	0.0	0	0.0	0	0.0	45	84.9	38	42.7	0	0.0	83	11.4
Public health practice	3	1.0	4	2.4	1	2.0	0	0.0	3	3.4	28	35.0	39	5.3
Academic setting	13	4.5	2	1.2	1	2.0	0	0.0	0	0.0	0	0.0	16	2.2
Other	1	0.3	2	1.2	1	2.0	0	0.0	3	3.4	0	0.0	7	1.0

• Out of all respondents, 50% were solo private practices and nearly 30% were in group private practices.

PDA/West: Permanente Dental Associates and Kaiser Permanente's Center for Health Research in 40-OR, 11-WA, 1-CO, 1-NM;

Midwest/Northeast: HealthPartners and private practitioners in 82-MN, 2-WI, 1-MA, 1-ME, 2-NY, 1-OH;

SK: Scandinavia countries of Denmark, Norway and Sweden.

²Percentages for this table only are within row.

2. Are you in the same building or organization with any providers of medical care?

- a. Yes, in the same building
- b. Yes, in the same organization, but not in the same building
- c. No

Table Q2: Same building/organization with medical care providers by DPBRN region

					0	ther			Mid	lwest/				
	AL,	/MS	FL,	/GA	Sou	theast	PDA	\/West	Nor	theast		SK	TO	TAL
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Are you in the same buildir	g or or	ganizat	tion w	ith any	provid	ders of n	nedica	al care?						
Yes, same bldg	56	19.3	57	34.3	17	33.3	11	20.8	51	57.3	21	26.3	213	29.2
Yes, same org not same														
bldg	9	3.1	1	0.6	0	0.0	23	43.4	3	3.4	3	3.8	39	5.4
No	225	77.6	108	65.1	34	66.7	19	35.9	35	39.3	56	70.0	477	65.4

[•] The majority of all practices (65%) were not located in the same building or organization with providers of medical care.

3. What percent of your patients do you estimate consider your practice their regular source of dental of

__ % of my patients

Table Q3: Regular source of dental care by DPBRN region

			Other		Midwest/	Midwest/							
	AL/MS	FL/GA	Southeast	PDA/West	Northeast	SK	TOTAL						
What percent of your patients do you estimate consider your practice their regular source of dental care?													
Mean	88.6	88.4	84.1	92.7	84.0	89.3	88.0						

• The average estimated percent of patients considering his/her practice as their regular source of dental care was 88%.

4. What percent of your patients do you estimate...

Seek dental care occasionally or regularly, whether or not they have a specific problem Seek dental care only when they have a problem of some type

____ % of patients

____ % of my patients

100% [must add to 100%]

Table Q4: Estimation of when patients seek dental care by DPBRN region

			Other		Midwest/	Midwest/							
	AL/MS	FL/GA	Southeast	PDA/West	Northeast	SK	TOTAL						
Seek de	Seek dental care occasionally or regularly, whether or not they have a specific problem												
Mean	73.7	75.2	76.5	71.9	73.6	86.3	75.5						
Seek de	Seek dental care only when they have a problem of some type												
Mean	26.3	24.8	23.5	28.1	26.4	13.7	24.5						

- The average estimated percent of patients seeking dental care on a regular basis was about 76%.
- The average estimated percent of patients seeking care only when they have a problem was about 25%.

5. What percent of your patients do you estimate have a regular source of medical care?

__ % of my patients

Table Q5: Estimation of patients who have regular medical care by DPBRN region

		•												
			Other		Midwest/		_							
	AL/MS	FL/GA	Southeast	PDA/West	Northeast	SK	TOTAL							
Percent	Percent of patients who have a regular source of medical care													
Mean	76.0	75.3	77.0	90.8	79.3	64.1	76.1							

• The average estimated percent of patients having regular medical care was 76% with SK being the lowest at 64% and PDA/Northeast being the highest at about 91%.

6. What percentage of your patients do you estimate have been diagnosed with ...

diabetes mellitus of any type %

cardiovascular disease (including hypertension) ___ %

Table Q6: Estimation of patients with specific diagnosis by DPBRN region

Other Midwest/													
	AL/MS	FL/GA	Southeast	PDA/West	Northeast	SK	TOTAL						
Percent	of patients of	diagnosed wit	h diabetes melli	tus of any type									
Mean	17.4	19.1	15.9	15.5	17.6	7.9	16.6						
Percent	Percent of patients diagnosed with cardiovascular disease including hypertension												
Mean	31.4	35.3	27.8	27.2	29.3	15.9	29.8						

- The average estimated percent of patients with diabetes mellitus was about 17%; SK was lower at about 8%.
- About 30% of patients were estimated to have cardiovascular disease; SK was lower at about 16%.

7. In the past month, how many patients have you referred to a physician for evaluation of medical problems?

__ patients referred in the past month (*number* of patients, <u>not</u> percentage)

Table Q7: Number of patients referred to physician in the last month by DPBRN region

					Midwest/		
	AL/MS	FL/GA	Other Southeast	PDA/West	Northeast	SK	TOTAL
Patients	you referre	d to a physic	cian for evaluation of n	nedical problems v	vithin the last mon	th	
Mean	3.5	4.2	3.1	2.6	5.1	0.8	3.5
(SD)	5.5	4.9	2.7	5.4	21.1	1.2	8.7

- The average number of patients referred to a physician in the last month was about 3; Midwest/Northeast was slightly higher at 5 while SK was considerably lower at 0.8.
- 8. Do you use a computer to manage clinical (as opposed to administrative) patient data?
 - a. Yes [if yes, then please answer this question...]

8a. What brand do you use?

- a. Dentrix
- b. Soft Dent
- c. Eagle Soft
- d. Eagle Dental
- e. Practice Works
- f. GSD Works
- g. Axium
- h. Other, please specify: _____
- b. No [if no, then please answer this question...]
 - 8b. Within the next two years, how likely are you to begin using a computer to manage clinical patient data?
 - a. Very likely
 - b. Somewhat likely
 - c. Not likely
 - d. Not sure at this time

Table Q8: Use of computer by DPBRN region

					Oth	ner			Midw	vest/				
	AL/	'MS	FL/	'GA	South	east	PDA/	/West	North	neast	S	SK	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Do you use a compu	ter to m	nanage	clinical	(as opp	osed to	administ	rative)	patient o	lata?					
Yes	198	68.3	136	81.9	43	84.3	49	92.5	71	80.7	73	91.3	570	78.2
If yes, what brand	do you	use?												
Dentrix	88	44.7	52	38.2	19	44.2	1	2.0	16	22.5	0	0.0	176	30.9
Soft Dent	14	7.1	14	10.3	4	9.3	0	0.0	4	5.6	0	0.0	36	6.3
Eagle Soft	40	20.3	33	24.3	15	34.9	0	0.0	10	14.1	0	0.0	98	17.2
Eagle Dental	1	0.5	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Practice Works	23	11.7	16	11.8	2	4.7	0	0.0	1	1.4	2	2.7	44	7.7
GSD Works	0	0.0	0	0.0	0	0.0	0	0.0	17	23.9	0	0.0	17	3.0
Axium	0	0.0	0	0.0	0	0.0	47	95.9	0	0.0	0	0.0	47	8.3
Other	31	15.7	20	14.7	3	7.0	1	2.0	23	32.4	71	97.3	149	26.2
No	92	31.7	30	18.1	8	15.7	4	7.6	17	19.3	7	8.8	158	27.8
Within the next two	years, l	now like	ely are	you to b	egin usi	ng a com	puter 1	to manag	e clinica	al patier	nt data	1?		
Very likely	8	8.7	8	26.7	4	50.0	4	100.0	6	33.3	5	71.4	35	22.0
Somewhat likely	22	23.9	8	26.7	1	12.5	0	0.0	5	27.8	2	28.6	38	23.9
Not likely	50	54.4	11	36.7	2	25.0	0	0.0	5	27.8	0	0.0	68	42.8
Not sure	12	13.0	3	10.0	1	12.5	0	0.0	2	11.1	0	0.0	18	11.3

- 78% of respondents use a computer to manage clinical data, among whom the most common software used was Dentrix at about 31%.
- For respondents not using computers to manage clinical data, about 46% were very or somewhat likely to within the next 2 years. This varied considerable across regions, e.g., over half (54%) from AL/MS were not likely to use computers to manage clinical data in the next 2 years while all from SK were very or somewhat likely to.

9. Please indicate how you store clinical information. If you store information on both paper and computer, please check <u>both</u> categories.

Type of information	Paper	Computer	Not at all
chief complaint			
medical history			
dental history			
progress notes			
problem list/diagnoses			
treatment plan			
completed treatment			
dental status			
periodontal charting			
radiographs			
extraoral images or photographs			
intraoral images or photographs			
appointments			
other:			

Table Q9(A): Ways of storing clinical information by DPBRN region

					Oth	ner			Midwe	est/				
	AL/	'MS	FL/	/GA	South		PDA/	West	North		S	SK .	TO	ΓAL
	Ν	%	Ν	%	N	%	Ν	%	N	%	Ν	%	N	%
Chief complaint														
Paper only	204	70.3	87	52.4	29	32.6	23	45.1	49	92.5	7	8.8	399	54.7
Comp. only	54	18.6	45	27.1	58	65.2	20	39.2	1	1.9	65	81.3	243	33.3
Both	31	10.7	34	20.5	2	2.3	8	15.7	3	5.7	7	8.8	85	11.7
Neither	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.3	2	0.3
Medical history														
Paper only	182	62.8	81	48.8	28	31.5	23	45.1	48	90.6	7	8.8	369	50.6
Comp. only	37	12.8	33	19.9	53	59.6	15	29.4	0	0.0	61	76.3	199	27.3
Both	71	9.7	52	31.3	8	9.0	13	25.5	5	9.4	11	13.8	160	22.0
Neither	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.3	1	0.1
Dental history														
Paper only	168	57.9	77	46.4	29	32.6	16	31.4	29	54.7	7	8.8	326	44.7
Comp. only	53	18.3	46	27.7	57	64.0	20	39.2	2	3.8	62	77.5	240	32.9
Both	69	23.8	43	25.9	3	3.4	15	29.4	22	41.5	11	13.8	163	22.4
Neither	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Progress notes														
Paper only	202	69.7	87	52.4	30	33.7	22	43.1	51	96.2	7	8.8	399	54.7
Comp. only	55	19.0	57	34.3	58	65.2	23	45.1	1	1.9	72	90.0	266	36.5
Both	32	11.0	22	13.3	1	1.1	6	11.8	1	1.9	1	1.3	63	8.6
Neither	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Problem/dx														
Paper only	190	65.5	80	48.2	28	31.5	17	33.3	43	81.1	7	8.8	365	50.1
Comp. only	56	19.3	61	36.8	59	66.3	26	51.0	2	3.8	72	90.0	276	37.9
Both	42	14.5	25	15.1	2	2.3	8	15.7	8	15.1	1	1.3	86	11.8
Neither	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Treatment plan														
Paper only	106	36.6	31	18.7	17	19.1	5	9.8	7	13.2	7	8.8	173	23.7
Comp. only	75	25.9	64	38.6	61	68.5	26	51.0	5	9.4	70	87.5	301	41.3
Both	107	36.9	71	42.8	11	12.4	20	39.2	41	77.4	3	3.8	253	34.7
Neither	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Completed tx														
Paper only	101	34.8	34	20.5	16	18.0	4	7.8	2	3.8	7	8.8	164	22.5
Comp. only	71	24.5	71	42.8	58	8.0	23	3.2	6	11.3	71	88.8	300	41.2
Both	117	40.3	61	36.8	15	2.1	24	3.3	45	84.9	2	2.5	264	36.2
Neither	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1

Paper only option accounted for about half (ranged from 45% to 55%) for medical and dental history, progress notes, and problem diagnosis, and about one-fourth (ranged from about 22-24%) for treatment plan and completed treatment.

[•] Computer only ranged from 27% (medical history) to 41% (treatment plan and completed treatment).

Table Q9(B): Ways of storing clinical information by DPBRN region

					Ot	her			Mid	west/				
	AL	/MS	FL,	/GA	Sout	heast	PDA	/West	Nort	heast	S	SK .	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Dental status														
Paper only	139	47.9	53	31.9	23	25.8	14	27.5	9	17.0	7	8.8	245	33.6
Comp.only	75	25.9	72	43.4	60	67.4	23	45.1	2	3.8	72	90.0	304	41.7
Both	66	22.8	38	22.9	5	5.6	12	1.7	41	77.4	1	1.3	163	22.4
Neither	10	3.5	3	1.8	1	1.1	2	3.9	1	1.9	0	0.0	17	2.3
Periodontal cha	arting													
Paper only	178	61.4	72	43.4	25	28.1	20	39.2	50	94.3	9	11.3	354	48.6
Comp.only	71	24.5	73	44.0	60	67.4	26	51.0	1	1.9	67	83.8	298	40.9
Both	36	12.4	20	12.1	3	3.4	5	9.8	2	3.8	4	5.0	70	9.6
Neither	5	1.7	1	0.6	1	1.1	0	0.0	0	0.0	0	0.0	7	1.0
Radiographs														
Paper only	135	46.6	47	28.3	14	15.7	6	11.8	43	81.1	9	11.3	254	34.8
Comp.only	119	41.0	99	59.6	70	78.7	34	66.7	3	5.7	62	77.5	387	53.1
Both	34	11.7	20	12.1	5	5.6	11	21.6	7	13.2	9	11.3	86	11.8
Neither	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Extraoral image	es													
Paper only	99	34.14	36	21.69	9	10.11	5	9.8	35	66	9	11.3	193	26.5
Comp.only	119	41.03	102	61.45	60	67.42	34	66.7	6	11	58	72.5	379	52.0
Both	30	10.34	19	11.45	10	11.24	8	15.7	10	19	7	8.8	84	11.5
Neither	42	14.48	9	5.42	10	11.24	4	7.84	2	3.8	6	7.5	73	10.0
Intraoral image	!S													
Paper only	98	33.8	37	22.3	9	10.1	4	7.8	43	81.1	6	7.5	197	27.0
Comp.only	125	43.1	102	61.5	66	74.2	39	76.5	3	5.7	63	78.8	398	54.6
Both	31	10.7	15	9.0	6	6.7	5	9.8	6	11.3	5	6.3	68	9.3
Neither	36	12.4	12	7.2	8	9.0	3	5.9	1	1.9	6	7.5	66	9.1
Appointments														
Paper only	47	16.2	19	11.5	4	4.5	3	5.9	2	3.8	5	6.3	80	11.0
Comp.only	187	64.5	132	79.5	78	87.6	44	86.3	41	77.4	71	88.8	553	75.9
Both	54	18.6	15	9.0	7	7.9	4	7.8	10	18.9	4	5.0	94	12.9
Neither	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Other														
Paper only	2	8.3	2	15.4	1	8.3	0	0.0	0	0.0	2	22.2	7	11.7
Comp.only	12	50.0	6	46.2	9	75.0	2	100.0	0	0.0	5	55.6	34	56.7
Both	1	4.2	3	23.1	0	0.0	0	0.0	0	0.0	2	22.2	6	10.0
Neither	9	37.5	2	15.4	2	16.7	0	0.0	0	0.0	0	0.0	13	21.7

Paper only was most common for periodontal charting at about 49%, otherwise ranged from 11% (appointments) to nearly 35% (radiographs).

[•] Computer only was highest for appointments at 76%, otherwise ranged from 41% to 57%.

Using both paper and computer was highest for "dental status" 22%, otherwise ranged from 9% to 13%.

10. Would you be willing to use data from your computer system for DPBRN studies, where feasible and allowed by confidentiality regulations, instead of having to enter them separately by hand or sending them to your DPBRN Regional Coordinator?

- a. Yes
- b. No
- c. Don't know

Table Q10: Willingness to use data from computer system by DPBRN region

					Oth	ner			Midv	vest/				
	AL/	MS	FL/	ĠΑ	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
Would you be	willing to	use dat	a from	your con	nputer s	system fo	r DPBRI	N studies	, where	feasible	and al	lowed b	у	
confidentiality	regulati	ons, inst	ead of l	naving to	enter tl	hem sepa	arately b	y hand o	r sendi	ng them	to you	r DPBRN	J	
Regional Coor	dinator?													
Yes	108	37.2	84	50.6	24	47.1	40	75.5	60	67.4	54	67.5	370	50.8
No	42	14.5	23	13.9	2	3.9	0	0.0	5	5.6	5	6.3	77	10.6
Don't know	140	48.3	59	35.5	25	49.0	13	24.5	24	27.0	21	26.3	282	38.7

About 51% of respondents were willing to use data from their computer system for DPBRN studies.

11. Would you be willing to use electronic forms (e.g., a secure system loaded onto your computer, laptop, or tablet PC) rather than paper forms for collecting research data?

- a. Yes
- b. No
- c. Don't know

Table Q11: Willingness to use electronic forms by DPBRN region

					Oth	ner			Midv	vest/				
	AL/I	MS	FL/0	GA	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
Would you be v	willing to	use elec	tronic fo	rms (e.g	., a secu	re systen	n loade	d onto yo	our com	puter, la	ptop, o	r tablet		
PC) rather than	paper fo	rms for o	collectin	g researd	ch data?									
Yes	149	51.4	102	61.5	28	54.9	43	81.1	70	78.7	68	85.0	460	63.1
No	35	12.1	19	11.5	5	9.8	1	1.9	3	3.4	7	8.8	70	9.6
Don't know	106	36.6	45	27.1	18	35.3	9	17.0	16	18.0	5	6.3	199	27.3

• 63% of respondents were willing to use electronic forms when collecting research data, about 10% opposed the idea and 27% were undecided.

12. When receiving periodic communication from your DPBRN Regional Coordinator, how do you prefer to be contacted?

- a. By personal email
- b. By e-mail to a staff member in my practice who will relay the information
- c. By personal telephone call
- d. By telephone call to a staff member in my practice who will relay the information
- e. Through social media (e.g., Facebook, Twitter, LinkedIn)
- f. By postal mail
- g. Other (please list):_____

Table Q12: Communication preference by DPBRN region

					Oth	ner	·		Midv	vest/				·
	AL/	'MS	FL/	GA	South	neast	PDA/	West	North	neast	S	SK .	TOT	AL
	Ν	%	Ν	%	N	%	Ν	%	N	%	Ν	%	N	%
When receiving	your DP	BRN Reg	ional Co	ordinato	r, how	do you p	orefer	to be co	ntacted?					
Pers. email	149	51.4	103	62.1	23	45.1	49	92.5	68	76.4	70	87.5	462	63.4
Email staff	25	8.6	14	8.4	6	11.8	2	3.8	9	10.1	5	6.3	61	8.4
Personal tel.	3	1.0	3	1.8	1	2.0	0	0.0	1	1.1	1	1.3	9	1.2
Tel. staff	9	3.1	10	6.0	4	7.8	0	0.0	1	1.1	0	0.0	24	3.3
Social media	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	0.1
Postal mail	104	35.9	32	19.3	16	31.4	2	3.8	9	10.1	4	5.0	167	22.9
Other	0	0.0	4	2.4	0	0.0	0	0.0	1	1.1	0	0.0	5	0.7

 The majority of respondents (63%) preferred communicating with their DPBRN Regional Coordinator through personal e-mail, 23% preferred postal mail. This differed considerably across regions.

13. When receiving a notice of new DPBRN results and network information (e.g., study findings, notice of publications, newsletters), how do you prefer to receive this information?

- a. By e-mail
- b. Printed, sent by postal mail
- c. Through social media (e.g., Facebook, Twitter, LinkedIn)
- d. Other (please list):

Table Q13: Preference for receiving DPBRN results by DPBRN region

		Other							Midv	vest/				
	AL/I	MS	FL/	GA	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
When receiving	a notice	of new [DPBRN r	esults ar	d netwo	ork inforr	nation (e.g., stud	dy findi	ngs, noti	ce of			
publications, ne	wsletters	s), how d	lo you p	refer to	receive t	this infor	mation?	?						
By email	144	49.8	108	65.1	29	56.9	49	92.5	66	74.2	73	91.3	469	64.4
Postal mail	143	49.5	57	34.3	21	41.2	3	5.7	22	24.7	7	8.8	253	34.8
Social media	1	0.4	0	0.0	1	2.0	1	1.9	0	0.0	0	0.0	3	0.4
Other	1	0.4	1	0.6	0	0.0	0	0.0	1	1.1	0	0.0	3	0.4

• About two-thirds (64%) of respondents preferred to receive results and network information by e-mail, and about one-third (35%) by postal mail.

Q14. Root canal/use of rubber dams

a. Do you do personally do any root canal procedures?

Yes [if yes, then please answer these questions...]

14a. On what percent of these root canals do you estimate that you use a rubber dam?

- a. None
- b. Less than 25%
- c. 25% 50%
- d. 51% 75%
- e. More than 75%, but less than 100%
- f. All of them

14b. Do you use any other type of isolation?

- a. Yes; please specify _____
- b. No

b. No

Table Q14: Use of rubber dam during root canals by DPBRN region

			Other			ner			Midw	est/				
	AL/	MS	FL/	GA	South	neast	PDA/	/West	North	east	S	SK .	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Do you persona	ally do a	ny root	canal pi	rocedure	es?									
No	82	28.3	47	28.3	12	23.5	4	7.6	13	14.6	17	21.3	175	24.0
Yes	208	71.7	119	71.7	39	76.5	49	92.5	76	85.4	63	78.8	554	76.0
On what per	cent of t	hese ro	ot canal	ls do you	ı estima	te that y	ou use	e a rubbe	er dam?					
None	50	24.2	13	10.9	3	7.7	0	0.0	4	5.3	11	17.5	81	14.7
<25%	40	19.3	13	10.9	4	10.3	0	0.0	5	6.6	11	17.5	73	13.2
25%-50%	9	4.4	5	4.2	1	2.6	0	0.0	1	1.3	4	6.4	20	3.6
51%-75%	13	6.3	6	5.0	1	2.6	0	0.0	4	5.3	2	3.2	26	4.7
76%-99%	41	19.8	23	19.3	8	20.5	2	4.1	14	18.4	15	23.8	103	18.6
All of them	54	26.1	59	49.6	22	56.4	47	95.9	48	63.2	20	31.8	250	45.2
Do you use a	ny othe	r type o	f isolati	on?										
Yes	104	50.2	50	42.0	10	25.6	7	14.3	21	27.6	16	25.4	208	37.6
No	103	49.8	69	58.0	29	74.4	42	85.7	55	72.4	47	74.6	345	62.4

- 76% of respondents perform root canal procedures.
- When performing root canal procedures, only 45% use a rubber dam every time and about 15% never use a rubber dam.
- About 38% of respondents use some other type of isolation.

Section 2: Types of dental staff

In this survey, the term "expanded function" means activities that dental hygienists and dental assistants cannot do in all U.S. states or Scandinavian countries.

Examples of "expanded duties" for dental hygienists and dental assistants would include cavity preparation for simple dental restorations, administering local anesthetic injections, re-cementing permanent crowns, extracting primary teeth or comparable procedures.

15. Please indicate if your practice setting employs any of the following dental providers:

		Check if your practice employs	Check if your practice does not employ
a.	Associate Dentist(s)		
b.	Expanded Function Dental Hygienist(s) (EFDH)		
C.	Dental Hygienist(s)		
d.	Expanded Function Dental Assistant(s) (EFDA)		
e.	Dental Assistant(s)		

Table Q15: Types of employment by DPBRN region

					Oth	ner			Midv	vest/				
	AL/	MS	FL/	GA	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Please indicate if	your pra	ctice set	tting em	ploys an	y of the	followin	g denta	l provide	rs:					
Assoc Dentist														
Employs	61	21.6	34	21.1	13	25.5	46	90.2	47	58.0	55	77.5	256	36.7
Not Employ	221	78.4	127	78.9	38	74.5	5	9.8	34	42.0	16	22.5	441	63.3
EFDH														
Employs	4	1.4	22	14.3	5	10.0	24	51.1	38	44.7	25	39.1	118	17.4
Not Employ	273	98.6	132	85.7	45	90.0	23	48.9	47	55.3	39	60.9	559	82.6
Dent Hygienist														
Employs	276	95.8	151	92.1	48	94.1	52	98.1	80	89.9	65	84.4	672	93.1
Not Employ	12	4.2	13	7.9	3	5.9	1	1.9	9	10.1	12	15.6	50	6.9
EFDA														
Employs	6	2.2	76	47.5	14	28.6	46	86.8	51	60.0	18	30.0	211	30.9
Not Employ	270	97.8	84	52.5	35	71.4	7	13.2	34	40.0	42	70.0	472	69.1
Dental Asst														
Employs	285	98.6	145	90.1	49	96.1	42	84.0	87	97.8	77	98.7	685	95.4
Not Employ	4	1.4	16	9.9	2	3.9	8	16.0	2	2.3	1	1.3	33	4.6

- The most common type of employee was a dental hygienist at 93% and dental assistant at 95%.
- The least common type of employee was the Expanded Function Dental Hygienist at 17%.

16. Please indicate all the personnel in your office who do each procedure (MARK ALL THAT APPLY):

Type of procedure	No one	Dentist	Dental Hygienist	Dental Assistant
Oral health education and prevention				
Take radiographs				
Take impressions				
Apply topical medications (fluoride, bleaching agents, cavity varnishes)				

Table Q16(A): Personnel performing specific procedures by DPBRN region

Table Q10(A)			- 0		Oth		<u> </u>	Midv	vest/					
	AL/	MS	FL/	GA	South	east	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Please indica	ate all th	e person	nel in y	our offic	e who d	o each pi	rocedur	e (MAR	(ALL TH	IAT APP	LY):			
Oral health e	educatio	n and pro	eventio	n										
No one	3	1.0	1	0.6	0	0.0	0	0.0	1	1.1	0	0.0	5	0.7
Dentist	212	73.1	133	80.1	37	72.6	45	84.9	75	84.3	69	86.3	571	78.3
Dent Hyg	265	91.4	145	87.4	45	88.2	50	94.3	77	86.5	61	76.3	643	88.2
Dent Asst	194	66.9	123	74.1	41	80.4	46	86.8	77	86.5	44	55.0	525	72.0
Take radiogr	aphs													
No one	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Dentist	174	60.0	90	54.2	21	41.2	20	37.7	42	47.2	66	82.5	413	56.7
Dent Hyg	260	89.7	143	86.1	44	86.3	48	90.6	75	84.3	60	75.0	630	86.4
Dent Asst	250	86.2	151	91.0	44	86.3	49	92.5	84	94.4	64	80.0	642	88.1
Take impress	sions													
No one	5	1.7	1	0.6	0	0.0	0	0.0	5	5.6	0	0.0	11	1.5
Dentist	206	71.0	109	65.7	33	64.7	36	67.9	58	65.2	77	96.3	519	71.2
Dent Hyg	197	67.9	79	47.6	28	54.9	8	15.1	42	47.2	46	57.5	400	54.9
Dent Asst	233	80.3	150	90.4	44	86.3	52	98.1	80	89.9	50	62.5	609	83.5
Apply topica	l medica	tions												
No one	5	1.7	1	0.6	0	0.0	0	0.0	5	5.6	0	0.0	11	1.5
Dentist	184	63.5	109	65.7	37	72.6	51	96.2	66	74.2	72	90.0	519	71.2
Dent Hyg	253	87.2	144	86.8	38	74.5	49	92.5	74	83.2	63	78.8	621	85.2
Dent Asst	141	48.6	105	63.3	34	66.7	45	84.9	75	84.3	39	48.8	439	60.2

- Dentists performed 71-78% of above procedures, except for radiographs, for which about 57% of dentists performed.
- Dental hygienist performed 85-88% of above procedures, except taking impressions, for which about 55% of hygienists performed.
- Dental assistants performed 60% (apply topical medications) to 88% (take radiographs) of above procedures.

Type of procedure	No one	Dentist	Dental Hygienist	Dental Assistant
Etch enamel surfaces, apply pit/fissure sealants				
Place and remove rubber dam				
Fabricate athletic mouth guards				
Denture soft relines				
Remove supra-gingival deposits				
Remove sub-gingival deposits				

Table Q16(B): Personnel performing specific procedures by DPBRN region

	AL/	MS	FL/	GA	Othe	r SE	PDA	/West	MW	/NE	S	K	ТО	TAL
	Ν	%	Ν	%	N	%	Ν	%	N	%	Ν	%	N	%
Please indica	ate all t	he perso	onnel in	your of	ice who	do each	proced	dure (MA	RK ALL	THAT AI	PPLY):			
Etch enamel	surface	es, apply	pit and	d fissure	sealants	5								
No one	11	3.8	0	0.0	1	2.0	0	0.0	6	6.7	3	3.8	21	2.9
Dentist	201	69.3	126	75.9	38	74.5	53	100.0	76	85.4	72	90.0	566	77.6
Dent Hyg	221	76.2	112	67.5	38	74.5	42	79.3	70	78.7	53	66.3	536	73.5
Dent Asst	31	10.7	75	45.2	29	56.9	41	77.4	58	65.2	27	33.8	261	35.8
Place and re	move r	ubber da	am											
No one	63	21.7	22	13.3	5	9.8	0	0.0	4	4.5	11	13.8	105	14.4
Dentist	201	69.3	114	68.7	36	70.6	48	90.6	81	91.0	65	81.3	545	74.8
Dent Hyg	43	14.8	14	8.4	6	11.8	6	11.3	10	11.2	5	6.3	84	11.5
Dent Asst	106	36.6	77	46.4	29	56.9	50	94.3	60	67.4	11	13.8	333	45.7
Fabricate at	hletic m	outh gu	ards											
No one	68	23.5	41	24.7	7	13.7	18	34.0	13	14.6	25	31.3	172	23.6
Dentist	173	59.7	91	54.8	28	54.9	30	56.6	49	55.1	46	57.5	417	57.2
Dent Hyg	76	26.2	16	9.6	11	21.6	2	3.8	14	15.7	23	28.8	142	19.5
Dent Asst	103	35.5	63	38.0	29	56.9	23	43.4	55	61.8	15	18.8	288	39.5
Denture soft	t relines	;												
No one	32	11.0	18	10.8	4	7.8	2	3.8	9	10.1	8	10.0	73	10.0
Dentist	246	84.8	139	83.7	46	90.2	48	90.6	78	87.6	68	85.0	625	85.7
Dent Hyg	16	5.5	3	1.8	1	2.0	1	1.9	2	2.3	10	12.5	33	4.5
Dent Asst	33	11.4	26	15.7	7	13.7	6	11.3	4	4.5	7	8.8	83	11.4
Remove sup	ra-gingi		osits											
No one	5	1.7	1	0.6	1	2.0	0	0.0	4	4.5	0	0.0	11	1.5
Dentist	171	59.0	100	60.2	35	68.6	36	67.9	58	65.2	70	87.5	470	64.5
Dent Hyg	270	93.1	151	91.0	48	94.1	53	100.0	76	85.4	65	81.3	663	91.0
Dent Asst	10	3.5	28	16.9	7	13.7	14	26.4	33	37.1	34	42.5	126	17.3
Remove sub		-												
No one	8	2.8	1	0.6	1	2.0	0	0.0	4	4.5	0	0.0	14	1.9
Dentist	190	65.5	108	65.1	34	66.7	37	69.8	63	70.8	72	90.0	504	69.1
Dent Hyg	261	90.0	148	89.2	47	92.2	52	98.1	78	87.6	65	81.3	651	89.3
Dent Asst	4	1.4	6	3.6	2	3.9	0	0.0	3	3.4	4	5.0	19	2.6

Dentists performed the majority of the above procedures except "remove supra-gingival deposits" and "remove sub-gingival deposits" where the dental hygienist was highest at 91% and 89%, respectively, and the dental assistant was least.

Type of procedure	No one	Dentist	Dental Hygienist	Dental Assistant
Perform root curettage				
Remove excess cement				
Place temporary fillings				
Cement and adjust temporary restorations				

Table Q16(C): Personnel performing specific procedures by DPBRN region

10010 Q20(0	·	<u> </u>		<u> </u>	Oth			region	Midv	vest/				
	AL/	MS	FL/	GA	South	neast	PDA,	/West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Please indic	ate all t	he perso	onnel in	your off	fice who	do each	proce	dure (MA	RK ALL	THAT AI	PPLY):			
Perform roc	t curett	age												
No one	15	5.2	2	1.2	1	2.0	0	0.0	5	5.6	1	1.3	24	3.3
Dentist	180	62.1	104	62.7	32	62.8	29	54.7	49	55.1	68	85.0	462	63.4
Dent Hyg	227	78.3	140	84.3	41	80.4	52	98.1	70	78.7	58	72.5	588	80.7
Dent Asst	3	1.0	2	1.2	0	0.0	1	1.9	3	3.4	2	2.5	11	1.5
Remove exc	ess cem	nent												
No one	3	1.0	0	0.0	0	0.0	0	0.0	1	1.1	0	0.0	4	0.6
Dentist	236	81.4	131	78.9	47	92.2	51	96.2	81	91.0	75	93.8	621	85.2
Dent Hyg	197	67.9	106	63.9	31	60.8	27	50.9	48	53.9	40	50.0	449	61.6
Dent Asst	194	66.9	127	76.5	37	72.6	37	69.8	65	73.0	14	17.5	474	65.0
Place tempo	orary fill	ings												
No one	9	3.1	4	2.4	0	0.0	0	0.0	0	0.0	0	0.0	13	1.8
Dentist	261	90.0	151	91.0	50	98.0	53	100.0	85	95.5	73	91.3	673	92.3
Dent Hyg	105	36.2	38	22.9	4	7.8	13	24.5	19	21.4	52	65.0	231	31.7
Dent Asst	124	42.8	88	53.0	24	47.1	23	43.4	52	58.4	33	41.3	344	47.2
Cement and	l adjust	tempora	ary rest	orations										
No one	8	2.8	3	1.8	0	0.0	0	0.0	0	0.0	1	1.3	12	1.7
Dentist	221	76.2	130	78.3	47	92.2	48	90.6	75	84.3	74	92.5	595	81.6
Dent Hyg	105	36.2	26	15.7	5	9.8	8	15.1	7	7.9	36	45.0	187	25.7
Dent Asst	172	59.3	110	66.3	30	58.8	36	67.9	46	51.7	27	33.8	421	57.8

[•] The dentist was greatest and dental hygienist was least in these categories except "perform root curettage" where the dental hygienist was greatest at about 81% and the dental assistant was least at about 2%.

Type of procedure	No one	Dentist	Dental Hygienist	Dental Assistant
Re-cement permanent crowns				
Cavity excavation and preparation for simple permanent restorations				
Place, carve and adjust restorations				
Suture removal				

Table Q16(D): Personnel performing specific procedures by DPBRN region

Table Q10(L	7. 1 6136	mici pe	1101111111	g specific	Oth		DI DINIA	region	Midv	vest/				
	AL/	MS	FL/	GA	South		PDA/	West		neast	S	K	TO	TAL
	N,	%	N =,	%	N	%	N	%	N	%	N	. %	N.	%
Please indic														
Re-cement		•		your on		uo cucii	p. occu	a.c (.v., t		,	, .			
No one	5	1.7	4	2.4	0	0.0	0	0.0	1	1.1	3	3.8	13	1.8
Dentist	240	82.8	140	84.3	45	88.2	49	92.5	72	80.9	64	80.0	610	83.7
	11	3.8	4	2.4	1	2.0	1	1.9	2	2.3	18	22.5	37	5.1
Dent Hyg	5	1.7	9	5.4	1	2.0	2	3.8	2	2.3	4	5.0	23	3.2
Dent Asst			_						2	2.3	4	3.0	23	3.2
Cavity excav				_	-									
No one	6	2.1	3	1.8	0	0.0	0	0.0	1	1.1	1	1.3	11	1.5
Dentist	241	83.1	142	85.5	45	88.2	47	88.7	71	79.8	66	82.5	612	84.0
Dent Hyg	3	1.0	0	0.0	0	0.0	0	0.0	1	1.1	15	18.8	19	2.6
Dent Asst	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	0	0.0	1	0.1
Place, carve	and adj	just rest	orations	5										
No one	8	2.8	3	1.8	0	0.0	0	0.0	0	0.0	0	0.0	11	1.5
Dentist	238	82.1	139	83.7	43	84.3	47	88.7	70	78.7	64	80.0	601	82.4
Dent Hyg	3	1.0	0	0.0	0	0.0	1	1.9	7	7.9	16	20.0	27	3.7
Dent Asst	1	0.3	0	0.0	1	2.0	0	0.0	35	39.3	4	5.0	41	5.6
Suture remo	oval													
No one	7	2.4	1	0.6	1	2.0	0	0.0	1	1.1	0	0.0	10	1.4
Dentist	218	75.2	125	75.3	43	84.3	45	84.9	65	73.0	60	75.0	556	76.3
Dent Hyg	79	27.2	50	30.1	7	13.7	7	13.2	14	15.7	42	52.5	199	27.3
Dent Asst	103	35.5	93	56.0	20	39.2	23	43.4	36	40.5	40	50.0	315	43.2

- Unlike other categories, the dentist was highest in all these categories, performing 76-84% of these procedures. The dental hygienist and dental assistant performed 27% and 43%, respectively, of suture removals.

Type of procedure	No one	Dentist	Dental Hygienist	Dental Assistant
Extract primary teeth				
Administer local anesthetic				
Administer nitrous oxide inhalation				

Table Q16(E): Personnel performing specific procedures by DPBRN region

					Oth	ner			Midv	vest/				
	AL/	MS	FL/	GA	South	neast	PDA/	West	Nortl	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Please indic	ate all t	he perso	nnel in	your off	ice who	do each	proced	ure (MA	RK ALL	THAT AP	PLY):			
Extract prim	ary tee	th												
No one	4	1.4	3	1.8	2	3.9	1	1.9	5	5.6	4	5.0	19	2.6
Dentist	239	82.4	139	83.7	42	82.4	46	86.8	64	71.9	61	76.3	591	81.1
Dent Hyg	6	2.1	2	1.2	2	3.9	0	0.0	0	0.0	7	8.8	17	2.3
Dent Asst	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	1	1.3	3	0.4
Administer l	local and	esthetic												
No one	2	0.7	1	0.6	0	0.0	0	0.0	0	0.0	1	1.3	4	0.6
Dentist	235	81.0	141	84.9	44	86.3	47	88.7	66	74.2	63	78.8	596	81.8
Dent Hyg	4	1.4	1	0.6	6	11.8	47	88.7	55	61.8	42	52.5	155	21.3
Dent Asst	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	5	6.3	6	0.8
Administer i	nitrous	oxide inl	halation	1										
No one	31	10.7	48	28.9	18	35.3	0	0.0	3	3.4	35	43.8	135	18.5
Dentist	196	67.6	88	53.0	24	47.1	46	86.8	62	69.7	31	38.8	447	61.3
Dent Hyg	78	26.9	20	12.1	9	17.7	46	86.8	44	49.4	4	5.0	201	27.6
Dent Asst	74	25.5	11	6.6	8	15.7	2	3.8	27	30.3	2	2.5	124	17.0

[•] The dentist performed the majority of these procedures, ranging from 61% to about 82%.

[•] The dental hygienist participated to a greater extent than the dental assistant in "administer local anesthetic" (21% vs. 0.8%) and administer nitrous oxide inhalation" (about 28% vs. 17%).

17. Have you ever worked with or employed an Expanded Function Dental Hygienist or Expanded Function Dental Assistant who was certified to perform care in areas beyond what is normally allowed (e.g., restorative functions, local anesthesia, administration of nitrous oxide)?

a. Yes b. No

Table Q17: Employed Expanded Dental Hygienist or Assistant by DPBRN region

ave you ever worked with or employed an Expanded Function Dental Hygienist or Expanded Function ental Assistant who was certified to perform care in areas beyond what is normally allowed (e.g., estorative functions local anesthesia, administration of nitrous oxide)? es 44 15.2 35 21.3 18 35.3 20 37.7 51 58.6 43 55.1 211 29.			<u> </u>	•											
N % N % N % N % N % N % N % N % N % N %						Oth	ner			Midv	vest/				
ave you ever worked with or employed an Expanded Function Dental Hygienist or Expanded Function ental Assistant who was certified to perform care in areas beyond what is normally allowed (e.g., estorative functions local anesthesia, administration of nitrous oxide)? es 44 15.2 35 21.3 18 35.3 20 37.7 51 58.6 43 55.1 211 29.		AL/	MS	FL/	GA	South	neast	PDA/	West	Nort	heast	S	K	TO	TAL
ental Assistant who was certified to perform care in areas beyond what is normally allowed (e.g., estorative functions local anesthesia, administration of nitrous oxide)? es 44 15.2 35 21.3 18 35.3 20 37.7 51 58.6 43 55.1 211 29.		N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
ental Assistant who was certified to perform care in areas beyond what is normally allowed (e.g., estorative functions local anesthesia, administration of nitrous oxide)? es 44 15.2 35 21.3 18 35.3 20 37.7 51 58.6 43 55.1 211 29.	lave	vou eve	er worke	d with c	r emplo	ved an E	Expanded	l Functi	on Dent	al Hygie	nist or E	xpande	d Funct	tion	
es 44 15.2 35 21.3 18 35.3 20 37.7 51 58.6 43 55.1 211 29.	Dent	al Assist	ant who	was cei	rtified to	, perforn	n care in	areas b	eyond w	hat is r	ormally	allowe	d (e.g.,		
	resto	rative f	unctions	local an	esthesia	, admini	istration	of nitro	us oxide	e)?	_				
o 245 84.8 129 78.7 33 64.7 33 62.3 36 41.4 35 44.9 511 70.0	Yes	44	15.2	35	21.3	18	35.3	20	37.7	51	58.6	43	55.1	211	29.2
	No	245	010	120	79.7	22	647	22	62.2	26	11 1	25	11 Q	E11	

 Only 29% of respondents have worked with or employed an Expanded Function Dental Hygienist or Expanded Function Dental Assistant.

18. Would you say that your level of experience working with expanded function Dental Hygienists and/or expanded function Dental Assistants is:

- a. Much more than average
- b. Somewhat more than average
- c. About average
- d. Somewhat less than average
- e. Much less than average

Table Q18: Experience working with Expanded Dental Hygienist or Assistant by DPBRN region

				Oth	ner			Midv	vest/				
AL/	MS	FL/	GA	South	neast	PDA/	West	North	neast	SI	K	TO	TAL
N	%	N	%	N	%	N	%	N	%	N	%	N	%
Would you	ı say that	t your le	vel of ex	perienc	e workinį	g with e	expanded	l functi	on denta	I hygien	ists and	l/or	_
expanded	function	dental	assistant	s is:									
Much more	e than av	erage											
10	3.8	18	11.1	5	10.0	2	3.8	13	14.6	6	8.5	54	7.8
Somewhat	more th	an avera	age										
12	4.6	16	9.9	2	4.0	7	13.2	24	27.0	13	18.3	74	10.7
About ave	rage												
55	20.8	58	35.8	22	44.0	28	52.8	25	28.1	24	33.8	212	30.8
Somewhat	less thar	n averag	e										
24	9.1	31	19.1	8	16.0	9	17.0	11	12.4	13	18.3	96	13.9
Much less	than ave	rage											
163	61.7	39	24.1	13	26.0	7	13.2	16	18.0	15	21.1	253	36.7

 About 37% of respondents rated their experience working with Expanded Function Dental Hygienists or Expanded Function Dental Assistants as much less than average.

19. Do you think that expanded function dental hygienists or expanded function dental assistants have a positive or negative impact on the provision of quality dental care?

- a. Very positive
- b. Positive
- c. Somewhat positive
- d. Somewhat negative
- e. Negative
- f. Very negative
- g. Don't know

Table Q19: Impact of expanded dental hygienists or assistants by DPBRN region

				,,,										
					Oth	ner			Midv	vest/				
	AL,	/MS	FL/	/GA	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	Ν	%	N	%	Ν	%
Do you think that	expand	ed funct	ion de	ntal hyg	ienists c	or expan	ded fun	ction de	ntal ass	istants h	nave a	positive	or	
negative impact or	n the pr	ovision	of qua	lity dent	tal care?	•								
Very positive	15	5.2	27	16.5	6	11.8	7	13.2	13	14.8	15	19.2	83	11.5
Positive	41	14.3	44	26.8	13	25.5	21	39.6	28	31.8	22	28.2	169	23.5
Somewhat pos.	65	22.7	32	19.5	6	11.8	12	22.6	20	22.7	20	25.6	155	21.5
Somewhat neg.	38	13.3	10	6.1	8	15.7	4	7.6	8	9.1	5	6.4	73	10.1
Negative	37	12.9	10	6.1	0	0.0	1	1.9	2	2.3	3	3.9	53	7.4
Very negative	18	6.3	9	5.5	1	2.0	0	0.0	0	0.0	0	0.0	28	3.9
Don't know	72	25.2	32	19.5	17	33.3	8	15.1	17	19.3	13	16.7	159	22.1

- Most respondents rated Expanded Function Dental Hygienists or Expanded Function Dental Assistants as having
 a positive impact on the provision of quality dental care; sum of very to somewhat positive categories was 57%.
- 22% of respondents were undecided, and a total of 21% considered the expanded positions as having a (very to somewhat) negative impact to some degree.

Section 3: Expanding duties of non-dentist providers

Dental therapists are dental providers who deliver a limited set of preventive, therapeutic and basic restorative services. In some countries, they have been recognized dental providers for some time, but in the United States it is a new provider type. Currently only the state of Minnesota recognizes this provider.

20. How informed are you about the dental therapist provider?

- a. Not at all I have never heard of It [please skip to Question #23]
- b. A little
- c. Somewhat
- d. Moderately
- e. Very

Table Q20: Knowledge of dental therapist provider by DPBRN region

					Otł	ner			Midv	vest/				
	AL/	/MS	FL/	'GA	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
How informed	are you	about tl	he dent	al thera	oist prov	vider?								
Not at all	88	30.5	37	22.7	7	13.7	22	41.5	3	3.4	60	76.9	217	30.0
A little	70	24.2	56	34.4	11	21.6	16	30.2	14	15.7	12	15.4	179	24.8
Somewhat	50	17.3	30	18.4	15	29.4	7	13.2	17	19.1	2	2.6	121	16.7
Moderately	53	18.3	27	16.6	13	25.5	4	7.6	25	28.1	2	2.6	124	17.2
Very	28	9.7	13	8.0	5	9.8	4	7.6	30	33.7	2	2.6	82	11.3

[•] When considering how well respondents were informed about a dental therapist provider, answers ranged from very informed at 11% to not at all at 30%.

21. The following are statements about potential impacts that dental therapists could have on dentists. For each one, please indicate the extent to which you agree or disagree with each statement

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't Know	
a It would disrupt the relationship I have with my patients						_
b. It would free up time for me to focus on more complex and interesting dental procedures						-
c The administrative burden would not be worth it						_
d I would trust the quality of their work in all areas for which they are trained						

Table Q21: Opinion about dental therapist provider by DPBRN region

					Oth	ner			Midv	vest/				
	AL/	'MS	FL/	'GA	South	neast	PDA/	West	Nortl	neast	S	K	TO	TAL
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
It would disrupt th	ne relati	onship I	have v	vith my _l	oatients									
Strongly agree	66	32.7	35	27.3	12	27.3	3	9.7	9	10.7	1	5.3	126	24.8
Somewhat agr.	82	40.6	44	34.4	17	38.6	8	25.8	21	25.0	5	26.3	177	34.8
Somewhat dis.	32	15.8	22	17.2	7	15.9	6	19.4	24	28.6	5	26.3	96	18.9
Strongly dis.	12	5.9	14	10.9	2	4.6	3	9.7	18	21.4	6	31.6	55	10.8
Don't know	10	5.0	13	10.2	6	13.6	11	35.5	12	14.3	2	10.5	54	10.6
It would free up ti	me for r	ne to fo	cus on	more co	mplex a	nd inter	esting d	ental pro	ocedure	es				
Strongly agree	19	9.4	9	7.0	4	9.1	2	6.5	14	16.7	7	36.8	55	10.8
Somewhat agr.	66	32.7	47	36.7	12	27.3	15	48.4	33	39.3	9	47.4	182	35.8
Somewhat dis.	60	29.7	25	19.5	9	20.5	4	12.9	18	21.4	0	0.0	116	22.8
Strongly dis.	48	23.8	35	27.3	15	34.1	7	22.6	12	14.3	1	5.3	118	23.2
Don't know	9	4.5	12	9.4	4	9.1	3	9.7	7	8.3	2	10.5	37	7.3
The administrative	e burder	would	not be	worth it	<u>.</u>									
Strongly agree	60	30.0	49	38.3	14	31.8	6	19.4	15	17.9	2	10.5	146	28.9
Somewhat agr.	69	34.5	29	22.7	15	34.1	6	19.4	23	27.4	2	10.5	144	28.5
Somewhat dis.	29	14.5	13	10.2	10	22.7	6	19.4	14	16.7	4	21.1	76	15.0
Strongly dis.	10	5.0	9	7.0	2	4.6	4	12.9	14	16.7	5	26.3	44	8.7
Don't know	32	16.0	28	21.9	3	6.8	9	29.0	18	21.4	6	31.6	96	19.0
I would trust the d	quality o	f their w	ork in	all areas	for whi	ch they	are trair	ned						
Strongly agree	12	5.9	7	5.5	5	11.4	0	0.0	14	16.9	3	15.8	41	8.1
Somewhat agr.	46	22.8	27	21.1	6	13.6	13	41.9	24	28.9	10	52.6	126	24.9
Somewhat dis.	58	28.7	32	25.0	13	29.6	6	19.4	20	24.1	3	15.8	132	26.0
Strongly dis.	68	33.7	38	29.7	14	31.8	5	16.1	17	20.5	1	5.3	143	28.2
Don't know	18	8.9	24	18.8	6	13.6	7	22.6	8	9.6	2	10.5	65	12.8

- The opinion that it would free up time for me to focus on more complex and interesting dental procedure, was about equal when totaling the agree (46.6%) and disagree (46.0%) responses.
- All other opinions led to a negative impression about dental therapists as the majority strongly or somewhat
 agreed they would disrupt relationships established with patients, the administrative burden would not be worth it,
 and the quality of their work could not be trusted.

22. Do you think that dental therapists will have a positive or negative impact on the provision of quality dental care?

- a. Very positive
- b. Positive
- c. Somewhat positive
- d. Somewhat negative
- e. Negative
- f. Very negative
- g. Don't know

Table Q22: Positive/Negative impact of dental therapists by DPBRN region

					Oth	ner			Midv	vest/				
	AL/	'MS	FL/	'GA	South	neast	PDA/	West	Nortl	neast	5	SK .	TO	TAL
	N	%	Ν	%	N	%	Ν	%	Ν	%	Ν	%	Ν	%
Do you think that o	dental th	erapists	will ha	ave a po	sitive or	negative	impact	t on the	provisio	on of qua	ality de	ental ca	re?	
Very positive	4	2.0	4	3.1	3	6.8	0	0.0	5	5.8	3	16.7	19	3.7
Positive	12	5.9	7	5.5	1	2.3	4	12.9	15	17.4	7	38.9	46	9.0
Somewhat pos.	26	12.9	22	17.2	5	11.4	6	19.4	16	18.6	2	11.1	77	15.1
Somewhat neg.	51	25.3	27	21.1	8	18.2	5	16.1	15	17.4	2	11.1	108	21.2
Negative	46	22.8	27	21.1	9	20.5	9	29.0	12	14.0	0	0.0	103	20.2
Very negative	41	20.3	22	17.2	11	25.0	1	3.2	6	7.0	0	0.0	81	15.9
Don't know	22	10.9	19	14.8	7	15.9	6	19.4	17	19.8	4	22.2	75	14.7

About 28% of all respondents considered dental therapists as having some type of positive effect on dental care
while a total of 57% considered them as having a negative impact.

23. Is your practice in the state of Minnesota?

- a. Yes [go to question 24M]
- b. No [go to question 24]

Table Q23: Practice located in Minnesota by DPBRN region

				Other						vest/				
	AL/	'MS	FL/	'GA	Sout	heast	PDA,	/West	Nortl	heast	:	SK	TO	TAL
	N	%	N	%	Ν	%	Ν	%	N	%	Ν	%	Ν	%
Is you	ır pract	ice in the	state o	f Minnes	ota?									
Yes	0	0.0	0	0.0	0	0.0	0	0.0	82	92.1	0	0.0	82	11.4
No	289	100.0	165	100.0	50	100.0	53	100.0	7	7.9	76	100.0	640	88.6

• 11% of respondents practice in the state of Minnesota while about 89% practice outside Minnesota.

MINNESOTA ONLY SECTION:

24M. The first class of dental therapists will graduate in Minnesota in 2011. How likely is it that your practice will consider hiring a dental therapist?

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Table Q24M: Consider hiring a dental therapist

	N	%
The first class of dental therapists will go	raduate in Minnesota in 2011. Ho	w likely is it that your practice wil
consider hiring a dental therapist?		
Very unlikely	34	42.0
Somewhat unlikely	9	11.1
Somewhat likely	25	30.9
Very likely	13	16.1

• Most practices were unlikely (to some degree) to hire dental therapists, totaling 53%.

25M. A specific aspect of the legislation passed was in response to access to dental care in the state of Minnesota. What impact do you think dental therapists will have on access to dental care in Minnesota?

- a. Decrease access
- b. Somewhat decrease access
- c. Have no impact on access
- d. Somewhat increase access
- e. Increase access
- f. Don't know

Table Q25M: Impact dental therapist will have in Minnesota

<u> </u>			
	N	%	
A specific aspect of the legislation passed	was in response to access to d	ental care in the state of	Minnesota.
What impact do you think dental therapis	ts will have on access to denta	l care in Minnesota?	
Decrease access	0	0.0	
Somewhat decrease	0	0.0	
No impact	20	24.4	
Somewhat increase	38	46.3	
Increase access	13	15.9	
Don't know	11	13.4	

When considering what impact dental therapists would have on access to dental care, 13% didn't know while 24% felt they would have no impact whatsoever. A total of 62% believed dental therapists would increase access to some degree. No one thought that there would be a decrease in access.

26M. When deciding whether to hire a dental therapist, how important do you think the following factors are:

	Not important	A little important	Somewhat important	Very important	
a. Issues associated with liability insurance					
 b. The nature of the contractual agreement between the dentist and dental therapist 					
 c. Whether the dental therapist has experience and/or licensure as a dental assistant 					
 d. Whether the dental therapist has experience and/or licensure as a dental hygienist 					

Table Q26M: Factors to consider when hiring dental therapists

	N	lot	Lit	ttle	Some	what	V	ery
	Imp	ortant	Impo	ortant	Impo	rtant	Important	
	N	%	N	%	N	%	Ν	%
Issues associated with liability insurance	10	12.4	14	17.3	16	19.8	41	50.6
The nature of the contractual agreement between the dentist and dental therapist	6	7.4	6	7.4	17	21.0	52	64.2
Whether the dental therapist has experience and/or licensure as a dental assistant	13	16.1	17	21.0	35	43.2	16	19.8
Whether the dental therapist has experience and/or licensure as a dental hygienist	11	13.8	14	17.5	38	47.5	17	21.3

- The concern of most importance was the nature of contractual agreement between the dentist and dental therapist with 85% of respondents considering it either somewhat (21%) or very (64%) important.
- The concern of least importance was whether or not the therapist had experience as a dental assistant with 63% of respondents considering it either somewhat (43%) or very (20%) important.

27M. The following are potential barriers to hiring a dental therapist. For each one, please indicate how much of a barrier it would be for your practice if you were to consider hiring a Dental Therapist.

		BIG BARRIER	Moderate Barrier	SMALL BARRIER	NOT A BARRIER	Don't Know
а	Space					
b	Overhead Costs					
С	Patient Acceptance					
d	Demand for the services they would provide					
е	Added supervisory responsibilities for the Dentist					
f	The risk they will leave the practice after they have gained experience					

Table Q27M: Barriers to consider when hiring dental therapists

	_		Mod	erate	Sr	mall	N	ot a	D	on't
	Big b	Big barrier		barrier		barrier		barrier		าดพ
	N	%	N	%	Ν	%	Ν	%	Ν	%
Space	11	13.6	24	29.6	20	24.7	22	27.2	4	4.9
Overhead Costs	13	16.5	16	20.3	26	32.9	13	16.5	11	13.9
Patient Acceptance	29	36.3	29	36.3	12	15.0	5	6.3	5	6.3
Demand for services	14	17.3	21	25.9	19	23.5	20	24.7	7	8.6
Added Supervisory	27	33.8	25	31.3	17	21.3	8	10.0	3	3.8
Risk of leaving	12	14.8	21	25.9	23	28.4	15	18.5	10	12.4

• When totaling the levels of barriers in each category, most ranged within 67% to 70%. However, two categories were higher, namely adding supervisory and patient acceptance at 86% and 88%, respectively.

28M. The Minnesota legislation requires that basic socio-demographic characteristics of the patients seen by dental therapists be reported to the State Board of Dentistry. How much of a concern would this be in the consideration of hiring a dental therapist in your practice setting?

- a. Of no concern
- b. Of little concern
- c. Of some concern
- d. Of much concern

Table Q28M: Concerns related to socio-demographic characteristics of patients

	N	%	
The Minnesota legislation requires that I	oasic socio-demogra	phic characteristics of the patients se	en
by dental therapists be reported to the S	tate Board of Denti	stry. How much of a concern would th	is
be in the consideration of hiring a dental	therapist in your p	ractice setting?	
No concern	24	29.6	
Little concern	26	32.1	
Some concern	20	24.7	
Much concern	11	13.6	

• Only about 30% of respondents considered this to be of no concern at all.

NON-MINNESOTA

- 24. At the current time Minnesota is the only U.S. state that licenses dental therapists. Other states are considering licensing dental therapists. If your state were to license dental therapists, how likely is it that your practice will consider hiring a dental therapist?
 - a. Very unlikely
 - b. Somewhat unlikely
 - c. Somewhat likely
 - d. Very likely

Table Q24: Consider hiring a dental therapist by DPBRN region

-														
	·	·		·	Ot	her	·	·	Mid	west/		•		
	AL/	'MS	FL,	/GA	Sout	heast	PDA/	West	Nor	theast	9	SK	TO	TAL
	N	%	Ν	%	N	%	N	%	N	%	N	%	Ν	%
At the current time N	/linneso	ta is the	only	U.S. sta	te that l	licenses c	lental th	nerapist	s. Othe	r states a	are co	nsider	ing	
licensing dental thera	apists. If	your st	ate w	ere to li	cense d	ental the	rapists,	how like	ely is it	that you	ır pra	ctice w	ill	
consider hiring a den	tal ther	apist?												
Very unlikely	179	62.2	88	53.0	34	66.7	19	37.3	4	57.1	32	45.7	356	56.2
Somewhat unlikely	56	19.4	33	19.9	12	23.5	18	35.3	3	42.9	19	27.1	141	22.3
Somewhat likely	31	10.8	37	22.3	3	5.9	11	21.6	0	0.0	17	24.3	99	15.6
Very likely	22	7.6	8	4.8	2	3.9	3	5.9	0	0.0	2	2.9	37	5.9

- The majority, 78%, of non-Minnesota respondents were somewhat or very unlikely to consider hiring a dental therapist.
- 25. A specific aspect of the legislation passed in Minnesota was in response to access to dental care in the state.

 If your state were to allow dental therapists to practice, what impact do you think dental therapists would have on access to dental care in your state?
 - a. Decrease access
 - Somewhat decrease access
 - c. Have no impact on access
 - d. Somewhat increase access
 - e. Increase access
 - f. Don't know

Table Q25: Impact dental therapist will have in your state by DPBRN region

					Oth	ner			Midv	vest/				
	AL/	MS	FL/	/GA	South	neast	PDA/	West	North	neast	S	K	TO	TAL
	N	%	Ν	%	N	%	N	%	N	%	Ν	%	Ν	%
A specific aspect of	the leg	islation	passe	d in Mir	nesota	was in re	sponse	to acces	s to der	ntal care	in the	state.	If you	r
state were to allow	dental	therapi	sts to	practice	e, what i	mpact do	you th	ink dent	al thera	pists w	ould ha	ave on	access	to
dental care in your	state?													
Decrease access	3	1.0	2	1.2	0	0.0	0	0.0	0	0.0	0	0.0	5	8.0
Somewhat dec	4	1.4	1	0.6	0	0.0	4	7.7	0	0.0	3	4.2	12	1.9
No impact	101	35.1	65	39.2	18	35.3	5	9.6	3	42.9	12	16.7	204	32.1
Somewhat inc	85	29.5	47	28.3	19	37.3	12	23.1	2	28.6	13	18.1	178	28.0
Increase access	18	6.3	18	10.8	3	5.9	10	19.2	0	0.0	2	2.8	51	8.0
Don't know	77	26.7	33	19.9	11	21.6	21	40.4	2	28.6	42	58.3	186	29.3

 Considering the impact dental therapists might have on access to dental care, 36% of non-Minnesota respondents believed it would increase access while 32% believed there would be no impact at all.