1999 JCO Orthodontic Practice Study
Part 2 Practice Success

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Last month's installment in this series covered trends in economics and practice administration since the first JCO Orthodontic Practice Study in 1981. The methodology of this 10th biennial Practice Study was also summarized. Complete results, methodology, and questionnaire are found in a separate volume *(1999 JCO Orthodontic Practice Study,* Index Publishers Corp., Boulder, CO, 1999).

In this month's article, we will cover factors that seem to be related to practice success, as expressed in terms of net income and numbers of case starts. Means are reported in many of the tables in this article because they must be used to test for statistical significance. Medians, which are less influenced by extremely high and low responses and thus may be more indicative of the average practice, are given in most of the tables elsewhere in the Practice Study. Annual figures, such as income and numbers of cases, are from the calendar year preceding the survey—in this case, 1998.

Net Income Level

For purposes of comparison, as in previous studies, respondents were arbitrarily divided into three net income categories: high (more than $420,000), moderate ($240,000-340,000), and low (less than $200,000). About one-fourth of the respondents to the Study fell into each group, with the remaining one-fourth omitted from these tables to clarify the differences among the three income groups.

High net income practices were evidently more efficient than moderate or low net income practices. The high income group reported nearly three times the gross income, more than four times the net income, and more than twice the number of cases as the low income group (Table 8). This was accomplished with fewer than twice the number of total employees, only one-third more chairs, and only 79 more annual hours worked by employees, and was reflected in a significantly lower overhead rate. Percentages of adult, third-party, and managed-care patients were not significantly different among the three groups.

One reason for the disparity in overhead might be that the low income group included a disproportionate number of practices that were just starting out (2-5 years in practice) or declining (21 or more years in practice). In fact, the overhead rate for the newest practices was significantly higher than for older practices (Table 9). The highest median net income was reported by those in practice 11-15 years, although the lowest median overhead rate was shown by 16-

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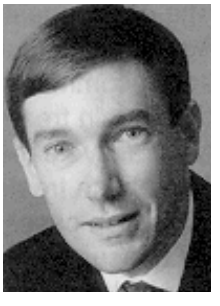
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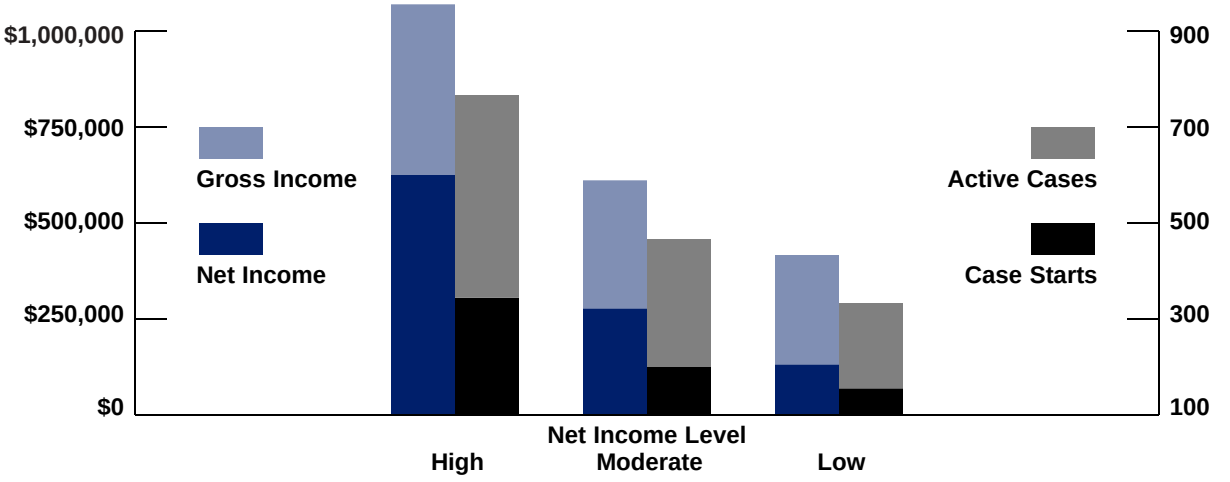


TABLE 8
SELECTED VARIABLES (MEANS) BY NET INCOME LEVEL

	High	Moderate	Low
Number of Satellite Offices	0.7	0.6	0.7
Full-Time Employees	7.0	4.7	3.4*
Part-Time Employees	2.2	1.5	1.5*
Total Referrals	514.2	307.3	226.6*
Case Starts	344.1	204.2	145.7*
Adult Case Starts	22.3%	22.2%	20.7%
Active Treatment Cases	767.3	463.5	330.8*
Adult Active Cases	19.5%	18.5%	17.6%
Patients Covered by Third Party	46.3%	48.6%	42.2%
Patients Covered by Managed Care	6.2%	5.8%	6.4%
Total Chairs	6.4	5.3	4.8*
Annual Hours	1751.4	1652.2	1672.4*
Patients per Day	64.5	48.1	36.8*
Emergencies per Day	3.3	2.6	2.7
Broken Appointments per Day	4.6	3.1	2.5*
Cancellations per Day	3.6	2.6	2.3*
Gross Income	$1,072,287	$610,899	$413,205*
Overhead Rate	48%	51%	60%*
Net Income	$624,707	$280,869	$136,625*

*Differences between these groups are statistically significant at or below the .01 probability level.

TABLE 9
SELECTED VARIABLES (MEDIANS) BY YEARS IN PRACTICE

	Net Income	Gross Income	Overhead Rate	Case Starts	Active Cases
2-5 years	$213,219	$499,000	60%*	180	390*
6-10 years	270,000	575,000	52%	200	415
11-15 years	306,025	720,000	53%	240	550
16-20 years	300,000	650,000	50%	200	481
21 or more years	298,200	600,000	52%	199	425

*Differences between means in these categories are statistically significant at or below the .01 probability level.

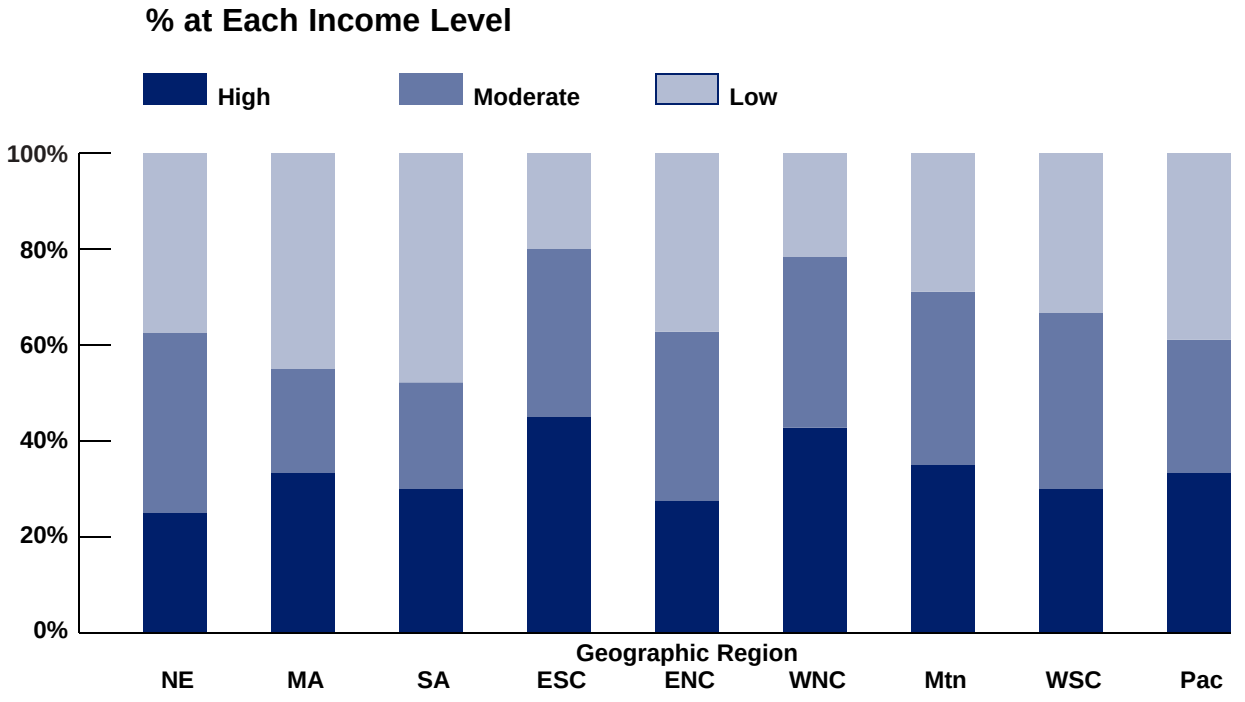


TABLE 10
NET INCOME LEVEL BY GEOGRAPHIC REGION

	High	Moderate	Low
New England (CT,ME,MA,NH,RI,VT)	25.0%	37.5%	37.5%
Middle Atlantic (NJ,NY,PA)	33.9	21.4	44.6
South Atlantic (DE,DC,FL,GA,MD,NC,SC,VA,WV)	30.6	22.2	47.9
East South Central (AL,KY,MS,TN)	45.0	35.0	20.0
East North Central (IL,IN,MI,OH,WI)	27.4	35.5	37.1
West North Central (IA,KS,MN,MO,NE,ND,SD)	42.9	35.7	21.4
Mountain (AZ,CO,ID,MT,NV,NM,UT,WY)	35.5	35.5	29.0
West South Central (AR,LA,OK,TX)	30.3	36.4	33.3
Pacific (AK,CA,HI,OR,WA)	33.3	27.5	39.1

TABLE 11
MEAN FEES AND FINANCIAL POLICIES BY NET INCOME LEVEL

	High	Moderate	Low
Child Fee (permanent dentition)	$3,980	$3,860	$3,824
Adult Fee	$4,298	$4,218	$4,073*
1997 Fee Increase (reported)	4.1%	4.6%	3.8%
1998 Fee Increase (reported)	4.4%	5.2%	4.2%
Initial Payment	23.2%	23.8%	25.3%
Payment Period (months)	22.9	22.8	23.0

*Differences between these groups are statistically significant at or below the .01 probability level.

TABLE 12
MEAN CASE STARTS BY USE OF MANAGEMENT METHODS

	Used	Not Used
Written philosophy of practice	241.3	216.4
Written practice objectives	247.8	219.6*
Written practice plan	267.8	218.7*
Written practice budget	286.5	215.9*
Office policy manual	235.7	208.8
Office procedure manual	240.5	215.5
Written job descriptions	233.5	222.4
Written staff training program	254.1	218.1*
Staff meetings	237.9	188.7*
Individual performance appraisals	244.6	204.3*
Measurement of staff productivity	279.6	218.6*
In-depth analysis of practice activity	264.7	211.2*
Practice promotion plan	257.9	212.5*
Dental management consultant	278.0	216.3*
Patient satisfaction surveys	261.3	214.3*
Employee with primary responsibility as communications supervisor	264.7	214.9*
Progress reports	237.8	221.5
Post-treatment consultations	240.6	221.5
Pretreatment flow control system	241.5	216.2
Treatment flow control system	252.2	220.4*
Cases beyond estimate report	247.5	222.1
Profit and loss statements	240.0	198.8*
Delinquent account register	232.3	216.5
Monthly accounts-receivable reports	236.4	200.0*
Monthly contracts-written reports	244.6	209.7*
Measurement of case acceptance	255.8	204.1*

*Differences between these groups are statistically significant at or below the .01 probability level.

to-20-year-old practices.

Taking into account only the respondents in the three net income categories, the East South Central and West North Central regions had the highest percentages in the high net income group (Table 10). The East South Central and West North Central regions also had the lowest percentages of respondents in the low net income group. At the other end of the scale, the South Atlantic and Middle Atlantic regions showed the highest percentages of respondents in the low net income category.

High net income practices received somewhat higher fees for their services than moderate or low net income practices did (Table 11). Fee increases and other financial policies did not differ significantly among the three groups, although high net income practices reported a slightly lower initial payment percentage than the other respondents did.

Management Methods

Users of every management method listed

TABLE 13
USE OF MANAGEMENT METHODS BY NET INCOME LEVEL

	High	Moderate	Low
Written philosophy of practice	51%	53%	42%
Written practice objectives	34	29	28
Written practice plan	27	18	14
Written practice budget	27	16	14
Office policy manual	79	74	72*
Office procedure manual	60	49	50
Written job descriptions	59	59	59
Written staff training program	35	34	28
Staff meetings	89	80	77
Individual performance appraisals	69	63	54
Measurement of staff productivity	21	18	16
In-depth analysis of practice activity	44	33	20*
Practice promotion plan	50	30	33*
Dental management consultant	28	18	15
Patient satisfaction surveys	36	30	22
Employee with primary responsibility as communications supervisor	31	23	21*
Progress reports	53	46	37
Post-treatment consultations	42	33	41
Pretreatment flow control system	59	45	50
Treatment flow control system	31	26	20
Cases beyond estimate report	31	23	23
Profit and loss statements	84	73	73
Delinquent account register	85	78	74
Monthly accounts-receivable reports	87	80	77
Monthly contracts-written reports	70	57	51*
Measurement of case acceptance	59	48	39*

*Differences between these groups are statistically significant at or below the .01 probability level.

on the survey reported greater mean numbers of case starts than non-users did, and the differences were statistically significant for 17 of the 26 methods (Table 12).

In addition, high net income practices were more likely to use each method than low net income practices were (Table 13). The differences among the three income groups were statistically significant for: office policy manual, in-depth analysis of practice activity, practice pro-

TABLE 14
MEAN CASE STARTS BY DELEGATION

	Routinely Delegated	Not Routinely Delegated
Record-Taking		
Impressions for study models	237.6	154.5*
X-rays	236.4	138.8*
Cephalometric tracings	252.0	209.2*
Clinical		
Impressions for appliances	242.5	189.6*
Removal of residual adhesive	245.8	210.0*
Fabrication of:		
Bands	252.3	195.1*
Bonds	267.1	205.2*
Archwires	257.8	210.9*
Removable appliances	254.2	206.0*
Insertion of:		
Bands	279.6	215.2*
Bonds	282.1	221.6*
Archwires	254.6	203.3*
Removable appliances	282.5	215.2*
Adjustment of:		
Archwires	281.8	220.8*
Removable appliances	292.3	221.4*
Removal of:		
Bands	245.9	209.0*
Bonds	247.4	209.2*
Archwires	241.1	185.8*
Administrative		
Case presentation	275.9	214.5*
Fee presentation	250.2	193.9*
Financial arrangements	241.3	177.3*
Progress reports	250.4	221.7
Post-treatment conferences	266.3	216.4*
Patient instruction and education	238.6	165.1*

*Differences between these groups are statistically significant at or below the .01 probability level.

motion plan, employee with primary responsibility as communications supervisor, monthly contracts-written reports, and measurement of case acceptance.

Delegation

Practices that routinely delegated every task listed on the questionnaire showed greater numbers of case starts than those that delegated only occasionally or not at all (Table 14). The

TABLE 15
ROUTINE DELEGATION BY NET INCOME LEVEL

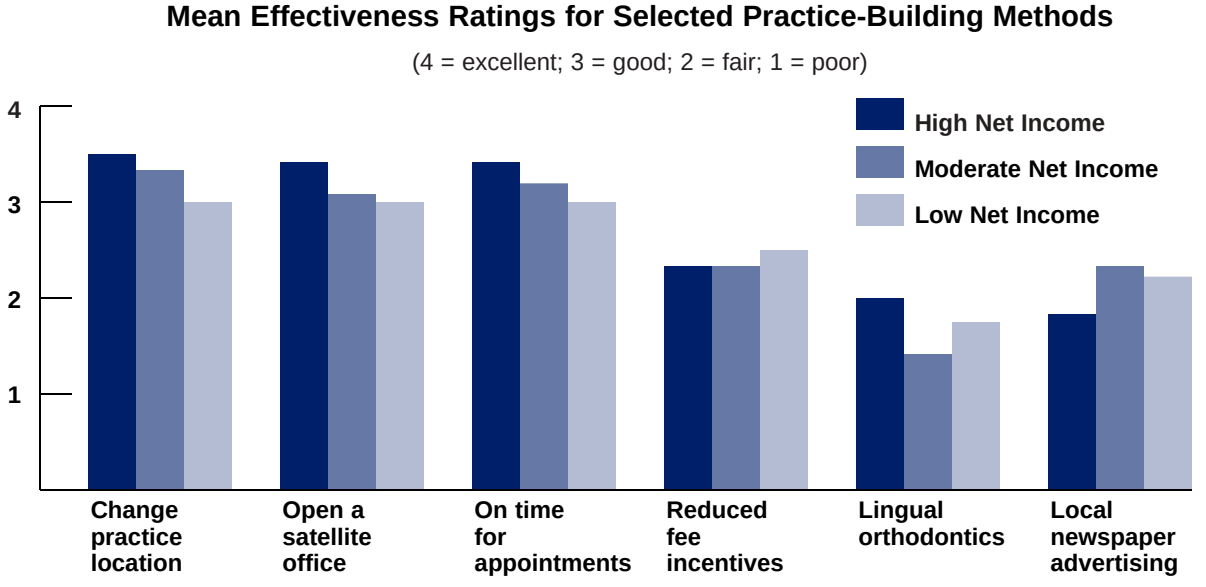
	High	Moderate	Low
Record-Taking			
Impressions for study models	98%	92%	79%
X-rays	96	92	88
Cephalometric tracings	47	46	28*
Clinical			
Impressions for appliances	89	72	62*
Removal of residual adhesive	45	44	27*
Fabrication of:			
Bands	67	50	39*
Bonds	42	29	21*
Archwires	41	26	21*
Removable appliances	55	43	33*
Insertion of:			
Bands	30	18	11*
Bonds	12	9	5
Archwires	58	46	39*
Removable appliances	24	9	11*
Adjustment of:			
Archwires	12	7	7
Removable appliances	12	5	5
Removal of:			
Bands	60	50	40*
Bonds	57	51	36*
Archwires	85	77	66*
Administrative			
Case presentation	29	24	12*
Fee presentation	68	65	52
Financial arrangements	83	84	72
Progress reports	33	21	16*
Post-treatment conferences	27	13	12*
Patient instruction and education	90	82	82

*Differences between these groups are statistically significant at or below the .01 probability level.

TABLE 16
PRACTICE-BUILDING METHODS BY NET INCOME LEVEL

	High		Moderate		Low	
	Used	Rating†	Used	Rating†	Used	Rating†
Change practice location	35%	3.5	27%	3.3	33%	3.0
Expand practice hours:						
Open one or more evenings/week	28	2.8	24	2.7	22	2.8
Open one or more Saturdays/month	17	2.6	16	2.5	19	2.8
Open a satellite office	43	3.4	27	3.1	33	3.0
Participate in community activities	65	2.9	48	2.6	60	2.7
Participate in dental society activities	58	2.3	54	2.3	55	2.2
Seek referrals from general dentists:						
Letters of appreciation	82	2.8	76	2.5	79	2.6
Entertainment	64	2.5	51	2.4	49	2.5
Gifts	75	2.5	64	2.4	65	2.3
No-charge initial visit	78	2.9	62	2.8	67	2.9
Education of GPs	46	2.7	33	2.7	32	2.6
Reports to GPs	73	2.7	70	2.7	68	2.7
Seek referrals from patients and parents:						
Letters of appreciation	66	2.9	63	2.8	65	2.7
Follow-up calls after difficult appointments	73	3.3	65	3.1	64	3.0
Entertainment	22	2.8	14	2.6	16	2.8
Gifts	35	2.7	28	2.7	39	2.6
Seek referrals from staff members	57	2.3	50	2.3	49	2.1
Seek referrals from other professionals (non-dentists)	33	2.2	16	1.9	22	2.1
Treat adult patients	83	2.9	83	2.7	90	2.7
Improve scheduling:						
On time for appointments	77	3.4	73	3.2	81	3.0
On-time case finishing	75	3.3	64	3.1	67	2.9
Improve case presentation	61	3.2	51	3.1	57	3.1
Improve staff management	55	3.2	39	3.1	47	2.9
Improve patient education	57	3.0	43	2.8	43	2.7
Expand services:						
TMJ	34	2.4	23	2.3	33	2.3
Functional appliances	40	2.5	36	2.5	35	2.6
Lingual orthodontics	17	2.0	10	1.4	12	1.8
Surgical orthodontics	56	2.4	44	2.3	50	2.4
Patient motivation techniques	50	2.5	42	2.8	43	2.6
Reduced fee incentives	19	2.3	20	2.3	24	2.5
More lenient fee payment arrangements	63	3.0	50	2.7	57	2.7
Practice newsletter	19	2.5	12	2.2	7	1.8
Personal publicity in local media	19	2.7	10	2.8	12	2.1
Advertising:						
Telephone yellow pages						
Boldface listing	50	1.6	46	1.8	50	1.8
Display advertising	25	2.0	13	1.7	20	2.0
Local newspapers	10	1.9	15	2.3	17	2.2
Local TV	3	NA	1	NA	3	NA
Local radio	3	NA	1	NA	5	NA
Direct-mail promotion	3	NA	13	1.8	8	2.3
Managed care	16	2.4	17	2.2	16	2.5
Management service affiliation	10	2.9	4	NA	7	2.4

†4 = excellent; 3 = good; 2 = fair; 1 = poor.



difference was statistically significant for every task except for progress reports, where the difference in means was still more than 10%.

The high net income practices were more likely to routinely delegate each task than the low net income practices were (Table 15). Differences among the three income groups were statistically significant for all tasks except x-rays, insertion of bonds, adjustment of archwires and removable appliances, fee presentation, financial arrangements, and patient instruction.

Practice-Building Methods

As in the 1997 Study, there were no significant differences among the three net income categories in terms of either usage or effectiveness ratings of the practice-building methods listed (Table 16). The methods used by at least 75% of the high net income practices were: treat adult patients, letters of appreciation to general dentists, no-charge initial visit, on time for appointments, on-time case finishing, and gifts to general dentists. Methods rated good (3.0) or better by the high net income practices that used them were: change practice location, open a satellite office, on time for appointments, follow-up calls after difficult appointments, on-time case finishing, improve case presentation, improve staff management, and improve patient education.

On the other hand, the methods rated fair (2.0) or worse by the low net income practices were: lingual orthodontics, practice newsletter, yellow pages boldface listing, and yellow pages display advertising.

(TO BE CONTINUED)