

FINDINGS FROM THE 1998 SURVEY OF NEW MEXICO GENERAL DENTISTS

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EXECUTIVE SUMMARY

The following are the highlights of this report:

- Ninety-one percent of all respondents are male.
- The average age is 48 years.
- More than half of the dentists graduated before 1980.
- An overwhelming majority (84%) borrowed money to finance their education. The average loan was \$41,364. The median debt of the respondents is \$35,000.
- The amount of money borrowed per person to finance dental education has risen significantly in the last decade. The median debt of the most recent graduates (1990s) is \$75,000. This amount is \$40,000 more than that of the previous cohort (1980s).
- The Western Interstate Commission for Higher Education (WICHE) program has remained the program most dentists use to fund their professional education. Use of Military programs, however, has decreased, from 31.8% of those borrowing to finance their education prior to 1970 to 4.2% in the 1990s, while use of State Loan Repayment Programs has increased from 9.1% prior to 1970 to 29.5% in the 1990s.
- Close to 60 percent of all respondents come from an urban or suburban background.
- Three-quarters of the respondents employ a licensed dental hygienist. Fewer rural (70%) than urban respondents (77%) reported employing at least one licensed dental hygienist.
- Fifty percent of the respondents have between 41 and 70 percent of patients that are privately insured. Overall, very few (11%) dentists have 30 percent or higher of their patient load that pays below normal rate for dental services. Dentists in community clinic practice (25 dentists were surveyed) report the highest patient load (80%) paying below the normal rate.

- Dentists with a rural background are more likely than those growing up in urban or suburban areas to practice in small communities of less than 10,000 people.
- Income is positively related to the population size of the location of practice. The number of dentists reporting annual incomes of greater than \$90,000 increases as the population size of the location of practice increases. Seventy-five percent of dentists who practice in very large urban areas (population size greater than 100,000) have incomes higher than \$90,000, while only 50 percent of dentists in communities with a population of 10,000 or less have similar incomes.
- The overall professional satisfaction of dentists is strongly associated with size of the community of practice. The highest level of satisfaction is found among dentists whose practices are in very large urban areas (population size greater than 100,000).
- The provision of dental services to Medicaid patients has a very high but negative correlation with population size of the location of practice. Percentage of dentists accepting Medicaid patients is highest in small communities (64%), where the New Mexico poverty rate is generally the highest, and lowest in large urban areas (21%).
- The provision of dental services to Medicaid patients is highly affected by administrative factors (such as slow or inadequate reimbursement and excessive paperwork) and degree of patient compliance. Providers who consider these factors very important are the least inclined to accept Medicaid patients.
- Inadequate reimbursement is the single most important reason given for non-acceptance of Medicaid patients, and constitutes 42 percent of all reasons given for not acceptance. Fully 78 percent of respondents who did not accept Medicaid patients mentioned this as a reason.
- Hispanic respondents have the highest percentage of Medicaid patients (40.5%), while Anglos and those of other racial groups have identical Medicaid acceptance rates (33%).
- Respondents who have solo practices accept the smallest proportion (26%) of Medicaid patients of all the practice categories (practice categories are solo, group, hospital and community clinic).

Variations in the profiles of dentists practicing in New Mexico are noted among different graduation cohorts (by decade of graduation from dental school).

- The proportion of dentists, by graduation cohort, providing services to Medicaid patients ranges between 31 and 34 percent. The oldest graduation cohorts (pre 1970) have the highest acceptance rate; slightly over 40 percent of these dentists have Medicaid patients.

- Almost equal percentages (20%) of graduates in the 1990s are either in a group or community clinic practice. Over 75 percent of those who graduated in the 1980s have a solo practice, compared to about fifty percent of those graduating in the 1990s.
- The overall percentage of female respondents was small (9%). However, the percentage of female dentists in each graduation cohort increased steadily. None of the pre 1970 graduation cohort were women. However, women were 25 percent of those respondents graduating from dental school in the 1990s.
- The percentage of Hispanic dentists in New Mexico has increased considerably, from 2% of the earliest graduation cohorts (1979 and earlier) to 29% of the most recent graduates (1990-1998). The share of Anglos has declined steadily, from 77% among those graduating in 1969 and earlier to 52% among 1990 and later graduates.
- Graduates before 1970 have the highest proportion (73.9%) with incomes higher than \$90,000. Two-thirds of the 1990s cohort have the similar incomes.
- The oldest cohorts have the highest level of overall professional satisfaction while the youngest cohorts have the lowest level. Two percent of those graduating before 1970 are dissatisfied with their current condition compared to an average of 10 percent among graduates between 1970 and 1998.

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This report is intended as a complement to the report that was released by the Institute of Public Policy (IPP) in December 1998. This report will focus specifically on the following questions.

- What are the correlates of dental practice in New Mexico?
- What strategies do New Mexican dentists employ to finance their dental education?
- What are the variances in dental practice by demographic characteristics and year of graduation among New Mexican dentists?

THE SAMPLE

The sample consists of 287 dentists located around New Mexico. Male dentists predominate (92%) among respondents. The average age is approximately 48 years. More than half (55.2%) are between the ages of 41 years and 55 years of age. More than one-third graduated in the 1970 decade. Approximately 30 percent graduated in the 1980 decade and 16 percent have graduated in this decade.

Family and friends (mentioned by 47.3% and 25% of respondents, respectively) have the greatest influence in the respondents' choice of practice location. Recruitment services (1.8%) as well as community-based recruitment agencies (2.2%) appear to have little influence in site selection. Approximately 25 percent reported making an independent decision on where to locate their practice.

More than 80 percent (84%) took out a loan to finance their dental education. The loans ranged from a low of less than \$100 to a high of \$500,000. On average, the amount incurred was \$41,364. Approximately half of the respondents borrowed \$35,000 or less. Hispanic respondents reported the highest amount of debt. Approximately half of the Hispanic respondents had debt of \$50,000 or more. White Non-Hispanics (Anglos) had the smallest amount of debt (median debt is \$35,000).

Close to 50 percent of all respondents used the Western Interstate Commission for Higher Education (WICHE) professional student exchange program. About one out of four respondents used a state loan repayment program. Other programs were reported by less than five percent of respondents.

Regardless of the amount of loan that the respondent had, the vast majority (85.4%) did not consider debt a factor in the decision to practice in a rural area. At the time of the interview, close to half (48%) reported ever practicing in a rural area. Slightly over one-third of respondents reported their current practice in a rural area.

In their practice, 75 percent of respondents employ a licensed dental hygienist. Of this group, 78 percent employ at least one full time hygienist, while more than 25 percent employ more than one full time hygienist. Respondents who reported a practice in a rural area (70%) are less likely than those who practice in an urban area (77%) to employ at least one licensed dental hygienist.

The proportion of dentists who have Medicaid patients was slightly over one-third (34%) of those surveyed. Of this group, about 82% percent offer full dental services to Medicaid patients of record, while about 65% report offering these services to other Medicaid patients. About 93% of those with Medicaid patients offer emergency dental services to Medicaid patients of record, while about 80% offer these services to other Medicaid patients.

In general, dentists in New Mexico have patients who are able to pay for services. Almost half have practices where between 41 percent and 70 percent of patients are privately insured. If the patients have no private insurance, they frequently pay on their own. More than half (56.1%) of dentists surveyed have self-paying patients as 30 percent or less of their patient load. Overall, very few dentists (11.2%) have 31 percent or higher of their patient load that pays below the normal rate. Respondents who are in a community clinic practice (25 respondents) have the highest proportion (80%) of their patient load that pays below the normal rate, while those respondents who have a solo practice reported the lowest proportion of patients (4.3%) who pay below the normal rate.

CORRELATES OF DENTAL PRACTICE IN NEW MEXICO

There are two parts to this section. The first part explores factors associated with location of the dental practice. Location of dental practice is measured in terms of population size. The second part examines factors associated with acceptance of Medicaid clients.

In the IPP report, factors identified by respondents as associated with rural practice were discussed quite extensively. Hence, this paper will explore factors associated with population size of the community where the dental practice is located. The zip code information provided by the respondents enabled us to match the location of their practice to a specific geographic area. Using census estimates, the zip code of the dental practice was assigned the corresponding population figure. The population of the community where the dental practice is located ranged from a few hundred people to 450,000 people.

Correlates of Location of Dental Practice

Close to 60 percent of the respondents practice in an urban area with a population greater than 50,000. Of this number, 36 percent are located in an urban area with a population greater than 100,000. In contrast, about one out of seven respondents has a practice in a community of less than 10,000 people.

Which respondents practice in large urban areas? Which ones practice in small communities? Does type of practice correlate with community size? Which programs for financing education are associated with location of practice?

Respondent characteristics. Table 1 shows that the hometown factor (i.e. where the respondent grew up) appears to be the greatest influence in determining the location of the dental practice. Respondents who grew up in an urban or suburban area are more inclined to practice in large urban areas. About half of the dentists who reported growing up in an urban area have their practice in an urban area with population greater than 100,000. About 70 percent of those reporting an urban

background located their practices in urban areas with a population greater than 50,000, compared to 60 percent of those reporting a suburban background and 42% of those with a rural background. Respondents from rural areas are twice as likely as suburbanites and three times as likely as urbanites to practice in a community with population of less than 10,000 people. Moreover, dental practice in medium-sized New Mexico communities (population between 10,000 and 50,000 people) is also more common among respondents who reported a rural background. The X^2 value of 25.612, which is statistically significant at .001 level, highlights the strong relationship between the hometown factor and current practice location.

Very few respondent characteristics (Table 1) examined in relation to current practice location achieved statistical significance.¹ Nevertheless, interesting insights can be gained by looking at the patterns implied by the data.

Anglo dentists (40%) are more likely than either Hispanic (31%) or Other Races (27.8%) to practice in areas with populations greater than 100,000 people. Close to 40 percent of Hispanic dentists have their practice in communities of 25,000 or less.

Table 1 indicates that dentists who have never married (48%) as well as those who are divorced, separated, or widowed have the highest likelihood (52.9%) of practicing in areas with populations greater than 100,000 people. Married dentists (34%) are less likely to have their practice in these highly populated communities; a greater percentage of this group (40.4%) locate their practice in communities with populations between 25,000 and 100,000.

Dental practice in communities with populations greater than 100,000 is not significantly influenced by age of respondents. Older respondents (50 and over) are only slightly more likely than their younger counterparts to locate their practice in these large communities. A third of respondents younger than 40 years old, most of whom are not married, and 36 percent of those between the ages of 40 and 49 years are located in these very populous communities. Percentages of the two oldest dental cohorts, 50-59 years old and 60 years and older, practicing in communities greater than 100,000 are 39 percent and 36 percent, respectively.

¹ Statistical significance is partially a function of the size of the sample. The sample of 287 respondents when distributed into different categories of independent variables sometimes resulted in very few number of cases for each cell.

On the other hand, current dental practice in smaller communities with less than 10,000 is negatively associated with the age of the respondent. Almost 20 percent of respondents in the youngest age groups practice in these small communities. This is twice as high as the proportion of respondents in the oldest age groups (60 years and over) practicing in these communities.

The association between gender and location of practice is very weak (X^2 value =6.593). This is clearly a function of the small number of female dentists in the sample. Twenty-five female dentists were interviewed for this survey. Nevertheless, some patterns are suggested by the data. Female dentists (36%) are twice as likely as male (18.8%) dentists to practice in communities with populations between 50,000 and 100,000. Also, female dentists (16%) are slightly more likely than their male counterparts (13.8%) to locate in small communities with populations of 10,000 or less.

Table 1 shows that the presence or absence of children in the respondent's household has some influence in the location of the respondent's practice. Respondents with children (25.7%) are twice as likely as their counterparts without children (12.9%) to have their practices in areas with populations between 50,000 and 100,000 people. Conversely, respondents with no children (40%) are more inclined to practice in areas with populations greater than 100,000.

Earlier findings in the IPP report in regards to age and location of dental practice are consistent with the pattern observed between dental school graduation cohorts and practice location. The oldest cohort (graduation pre 1970) has the greatest tendency to practice in large urban areas. More than 40 percent of this cohort have dental practices in areas with more than 100,000 people. Comparable numbers for later cohorts are 33 percent (1970-1979), 38 percent (1980-1989), and 36 percent (1990 and later).

Table 1 shows that population size is highly correlated with income of dentists. Income increases in direct relationship to population size. Seventy-five percent of dentists who practice in areas with at least 100,000 people have incomes that are greater than \$90,000. Only half of those who practice in the smallest communities (10,000 or less) reported similar incomes.

Dentists in the smallest (58.3%) and the largest communities (52%) were most likely to have experienced increases in their incomes in the last three years. In

comparison, less than half (47%) of respondents who have their practice in communities with populations between 10,000 and 50,000 people reported income increases during the same time period.

Source of financing for dental education. The use of federal and state government programs for financing their dental education was reported by 80 percent of respondents. Participation in the WICHE program (48.4%) was most commonly reported by those who borrowed to finance their professional education. The least commonly used was the State Loan for Service Program. Only 11 respondents utilized this program.

Table 2 shows that respondents who participated in the State Loan Repayment program (42.1%) and the WICHE student exchange program (39.8%) have the greatest tendency to practice in urban areas with a population of 100,000 or more. In contrast, regardless of their type of practice (solo, group, hospital or community clinic), users of the National Health Service Corps (NHSC) program have the highest propensity to practice in smaller communities of less than 10,000 people. Close to 30 percent of users of this program are located in small communities. Respondents who used a military service program (8.7%) to finance their dental education are least likely to currently practice in small communities.

More than 80 percent of all respondents had incurred a debt in financing their dental education. The median debt incurred by the respondents was \$35,000. Respondents who practice in communities with populations between 50,000 and 100,000 people reported the highest amount of debt. The median debt among this group was \$49,000. Practitioners in communities with populations between 10,000 and 25,000 had the least educational debt (\$30,000).

Table 1 shows that for the most part, the higher the amount of loan borrowed the less likely that the respondents would locate their practice in a community of greater than 100,000 people. Respondents who had no debt for their dental education are unlikely to practice in small communities. Three out of 47 respondents who had no debt reported a practice in communities with populations below 25,000.

Type of practice. Solo, or individual, practice is the most common practice type among respondents (Table 2). The percentage of solo practitioners increases slightly with the size of the community of practice. About 73% of those practicing in the largest communities and 68% in the smallest have individual practices. Table 2 also indicates that, of those surveyed, community clinic practice is more common in the smallest communities. This type of practice constitutes 20 percent of all dental practice in these communities. Group practice (25%) is highest in medium-sized communities (25,001-50,000 people) and lowest (2.5%) in the smallest communities.

Satisfaction with current condition. The motivation to maintain an office in a particular location may be partly influenced by the overall professional satisfaction of the dental practitioner. A satisfaction index was constructed with the use of scores estimated using a statistical technique called factor analysis. Factor analysis is a way of constructing composite scores out of many variables chosen to measure different dimensions of a particular construct, such as professional satisfaction.²

The satisfaction index consists of responses to the following questions:

- How satisfied are you with the cooperation among professionals in your local dental community?
- How satisfied are you with the professional development opportunities available to you?
- How satisfied are you with the respect you receive in the medical community as a dentist?
- How satisfied are you with the work conditions in your current place of practice?
- How satisfied are you with your income?
- How satisfied are you with your work schedule?

² The following equation was used in estimating the weight of each factor incorporated in each of the index used in the satisfaction index: $\text{Index} = E_j (b_{ij}/\lambda_i) * X_j$, where b_j is the component loading estimated by factor analysis for the j^{th} variable on the i^{th} component, and λ_i is the associated eigen value.

These responses were weighted according to the strength of their estimated correlation with the level of satisfaction expressed in each case by the respondents, and were then added together to obtain a single indicator of professional satisfaction for each respondent. The resulting satisfaction index ranged in value from one to three. A value of one means that the respondent was “not at all satisfied.” A value of two was equivalent to “satisfied” and three was “very satisfied.”

More than half (54%) of all respondents expressed overall satisfaction (a value of two or three) with their current situation. Close to 40 percent (37.1%) had an overall satisfaction index of three (very satisfied). A small proportion (8.9%) was not at all satisfied with their current situation as a dentist.

Table 1 shows that professional satisfaction is inversely associated with community size. Dental practitioners in small communities are the most dissatisfied while those in the largest urban areas are the most satisfied. A very small proportion (1.3%) of respondents with practices in areas of more than 100,000 population had a satisfaction index of one or “not at all satisfied.” In contrast, almost 20 percent of respondents who practice in communities of less than 10,000 people had the same low satisfaction index.

Data from the qualitative responses indicate that low pay was mentioned by the most rural respondents (24.7%), followed by lack of dental specialists or professional support in the community (19.3%), geographic isolation (14.5%), and low patient health I.Q. (12.7%) (Table 5). These reasons provide some explanation for the higher than average proportion of dissatisfied dental providers in rural and in small communities.

Correlates of Service Provision to Medicaid Clients

This section will attempt to determine the factors that are associated with the provision of dental services to Medicaid clients. Are there variations among different subgroups of dentists? If so, what are these variations? While most of the relationships discussed below are not statistically significant, this may simply be a function of the small sample size of many of the sub-groups under consideration.

Respondent characteristics. The provision of dental services to Medicaid patients varies greatly among different groups of dental providers. Table 6 shows that respondents who have never been married (40%) are more likely than either those who are currently married (33%) or those who are separated, divorced, or widowed (31.6%) to provide dental services to Medicaid recipients.

Hispanic respondents (40.5%), more than Anglos (33%) or respondents of other racial groups (33.3%), accept Medicaid patients. The oldest (43.2%) and the youngest respondents (41.7%) are those most likely to have Medicaid clients. This is consistent with data on graduation cohorts. The earliest (41.8%) and the latest graduates (34.1%) have the higher proportions accepting Medicaid patients. The data also show that the number of years of dental practice at the current location does not have a statistically significant effect on proportion of dental providers who accept Medicaid clients.

Table 6 shows that respondents who grew up in a rural area (35.4%) are about as likely as those who grew up in an urban area (37%) to provide services to Medicaid patients. Those who grew up in a suburban area (26.6%) are least inclined to accept Medicaid patients.

The data also show that female dentists (48.0%) are more likely than their male counterparts (32.7%) to serve Medicaid patients. On the other hand, the presence of children in the household has little or no association with the provision of services to Medicaid patients.

The one clear relation that can be gained from the data is that the provision of dental service to Medicaid patients is associated with community size, and this relationship is statistically significant. Table 6 shows a steady decline in the proportion of dentists accepting Medicaid patients as the population size increases. Highest acceptance of Medicaid patients is by respondents in communities with less than 10,000 people. Two out of three dental practitioners in these small areas have Medicaid patients while in very large urban areas only one in five dentists accepts these patients. This difference may be attributed to a higher proportion of the poor and fewer dentists available to serve populations in small New Mexico communities.

Type of program used to finance education. Overall, the provision of dental services to Medicaid patients varies little with the amount of debt incurred or the type of program used by respondents to finance their education. Table 3 shows a nearly equal proportion of respondents who had no debt (29.3%) and those who owed \$50,000 or more (30.8%) that accepts Medicaid patients. Respondents who borrowed between \$20,000 and \$50,000 to finance their education are slightly more (35.8%) disposed to providing dental services to these patients.

When provision of dental services to Medicaid patients is examined by type of state or federal program used (Table 7) little difference is found in Medicaid acceptance rates between users and non-users of these programs. The proportion of respondents accepting Medicaid clients by program ranged from 30 percent to 36 percent. The one exception to this general observation is the higher than average proportion of NHSC program users (42%) who accept Medicaid clients.

Type of practice. Table 8 points to a strong association between type of dental practice and acceptance of Medicaid clients. Only 26% of dentists who have individual practices accept patients with Medicaid insurance. As expected, the acceptance of Medicaid patients is highest among dentists in community clinics, as these dentists must accept Medicaid patients, and in hospital practice (66.7%). Respondents who reported serving in other types of dental practice (such as nursing home and prison dentistry) also have a high Medicaid acceptance rate (70%). However, the number of respondents in this type of practice is small (10 respondents). The percentage of respondents in group practice accepting Medicaid patients (36.7%) is not significantly different from the average percent for the entire survey sample (33.7%).

Reasons for non-acceptance of Medicaid patients. Reluctance to accept Medicaid patients appears to be related to administrative difficulties, reimbursement issues, and the individual patient's behavioral patterns. Two indices measuring different aspects of the respondents' experience with Medicaid patients were constructed.

First, an "administrative index" was created combining three aspects of the administrative and reimbursement processes associated with dental service provision to

Medicaid patients. This index includes “excessive paperwork,” “slow reimbursement,” and “inadequate reimbursement.” Of these three indicators, inadequate reimbursement carries the greatest weight. Table 9 ranks the reasons why respondents do not accept Medicaid patients. Inadequate reimbursement was ranked first with 78 percent of those not accepting Medicaid patients citing this as a reason. (This translates to 42 percent of all reasons given by respondents.) Excessive paperwork was reported by about 32 percent of respondents while slow reimbursement was mentioned by less than 20 percent of respondents.

Second, a “client compliance index” was constructed from the factor scores of two items, namely, “Medicaid patients are difficult to work with’ and “Medicaid patients miss appointments.” Both administrative and client compliance indices have values that ranged from one to three. A value of one means that these factors are not at all important to the provider while a value of three indicates the high degree of importance of these factors.

Table 10 shows that both indices have a strong negative association with provision of dental services to Medicaid patients. Only one out of 14 (7%) respondents who had a score of three (very important) in the compliance index will accept a Medicaid patient, while about one out of four (24%) who do not consider patient compliance important will accept a Medicaid patient. Comparative numbers among respondents who scored one or three in the administrative index are higher. One out of eight (12%) respondents accepts a Medicaid patient when administrative issues are considered very important, while 41 percent of those with a low score in the administrative index will provide dental services to Medicaid patients.

VARIATIONS IN DENTAL PRACTICE IN NEW MEXICO

This section will compare the different dental school graduation cohorts with respect to their individual characteristics, type of government program used and the

amount of loan borrowed to finance their education, type of dental practice, and their level of satisfaction with their current practice conditions. Tables 11 and 12 summarize the results of the analysis.

Respondent characteristics

In the last 30 years, the share of Hispanics among dentists in New Mexico has increased significantly, from two percent among the earliest cohorts (1979 and earlier) to 29 percent among the most recent graduates (1990-1998). In comparison, the share of Anglos has steadily declined, from 77 percent among 1969 and earlier graduates to 52 percent among 1990 and later graduates. Meanwhile, the share of Other Races fluctuated from one graduation cohort to another. Table 11 shows that respondents of Other Races comprise 22 percent of the 1969 and earlier graduates, 14 percent of the 1970-1979 graduates, 23 percent of the 1980-1989 graduates, and 19 percent of the most recent graduates.

Recent dental school graduation cohorts are more likely to have an urban background. Table 11 shows that the share of those with this background has increased from 35 percent among the earliest graduation cohort to 48 percent among the most recent. Conversely, the share of respondents with a rural background steadily declined from 47 percent among the earliest graduates to 34 percent among the most recent graduates. Eighteen percent of the most recent graduates claimed a suburban background, which is equal to their share 30 years ago. Among the 1970s and 1980s graduates, 22 percent and 29 percent, respectively, reported a suburban background.

Women dentists are less than 10 percent of all graduates. Although their numbers are few, women dentists appear to be gaining ground. Table 11 points to the absence of female graduates among the 1969 and earlier graduation cohort. Among the 1970s graduates, five percent are women. Among the 1980s graduates, 10 percent are women and among the latest cohort of graduates, 25 percent are women.

A variable (Ever Practiced in Rural Area) was created from the survey data incorporating those currently practicing in rural areas and those that had practiced in the past, but were not currently practicing. The practice of dentistry in rural areas appears to be inversely related to decade of graduation. The earliest graduates are least likely

to have ever practiced in a rural area, while the most recent are most likely to report having ever practiced in a rural area. Half of those who graduated before 1970 have never had a rural practice, while two-thirds graduating in the 1990s have practiced in a rural area.

As expected, income is negatively associated with year of graduation. The most recent graduates have the lowest income, on average. Close to 50 percent of graduates in the 1990s reported income below \$90 thousand. In contrast, only one third of the earliest graduates (1969 and earlier) fell into this category.

Type of practice

Overall, an overwhelming majority (68.8%) of respondents reported having a solo practice. Table 12 shows variations among the graduation cohorts. Graduates between 1980 and 1989 (76.7%) have the highest proportion of solo practice. Graduates between 1970 and 1979 (72.5%) have the next highest proportion of solo practice followed by the earliest cohort (64.3%).

The lowest proportion of solo practitioners (52.1%) is noted among the latest graduates (1990-1998). Table 3, Panel IV shows that the median amount of debt owed by this cohort is the highest (about \$75,000), or \$50,000 more than the earliest cohort (1969 and earlier).

Financing for education

The amount of money borrowed by respondents to finance their dental education has risen steadily over the decades. The highest increase in the amount of money borrowed was noted between the 1980s and 1990s graduation cohorts. The median debt rose by \$40,000 (Table 3, Panel IV).

Changes are also indicated in the type of program that respondents used to finance their dental education. The proportion of those using military programs has dropped precipitously since 1969. Among the 1969 and earlier cohorts, almost one third indicated a military service program as a means of financing their dental education. This dropped to 11 percent in the 1970s and continued to drop in later years. By the

1980s, only two percent of all graduates reported using a military service program in their dental education.

Table 12 shows that the use of the WICHE student exchange program has decreased somewhat over the decades. The proportion of graduates who used this program declined from 59 percent among the earliest cohorts to 50 percent among the most recent graduates. Similarly, the number of users of the NHSC program has also dropped, from 11 users in the 1970s to four users in the 1990s graduation cohort. On the other hand, the number of users of the State Loan Repayment Program experienced a surge between 1970 and 1989, from two users in the 1960s to 32 users in the 1980s. In the 1990s, the number who reported using this program has dwindled to 16 persons.

Professional Satisfaction

The overall index of professional satisfaction varies significantly across the graduation cohorts. The earliest graduates have the highest index of satisfaction (Table 11). More than half of respondents (53.2%) who graduated before 1970 had a satisfaction level of three (very satisfied). In comparison, only 27 percent of graduates in the 1990s had this level of satisfaction.

Table 11 also shows that among the earliest graduates (1969 and earlier) only two percent had a score of one (dissatisfied) in this satisfaction index. Ten percent of the most recent graduation cohort (1990-1998) had a similar score. Graduates in the 1980s (12.3%) have the highest proportion who were dissatisfied with their overall condition.

STATISTICAL TABLES