REPORT OF THE
JOINT SUBCOMMITTEE STUDYING

AVAILABILITY OF DENTAL HYGIENISTS

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 36

COMMONWEALTH OF VIRGINIA
RICHMOND
1997

REPORT OF THE
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OF DENTAL HYGIENISTS
HJR 81

Purpose of Study

The 1996 Session of the General Assembly approved House Joint Resolution 81 to study the availability of dental hygienists in the Commonwealth The study committee is charged with

1 Determining the availability of dental hygienists throughout the Commonwealth,
2 Reviewing the Commission on Dental Accreditation standards applicable to alternative accredited educational programs in dental hygiene which parallel existing dental hygiene programs in the Commonwealth,
3 Determining the possibility of existing funding and approved programs to make available additional accredited educational opportunities for those who desire to become dental hygienists, and
4 Considering ways, incentives, and programs which will encourage and make available additional dental hygienists in rural and underserved areas

Availability of Dental Hygienists

Information about the availability of dental hygienists can be compiled from a variety of sources

VDA/VCU Study, 1990

A study conducted by the Survey Research Laboratory at Virginia Commonwealth University for the Virginia Dental Association in 1990 found an average unmet need for dental hygienist services of about 5 4 hours per week per dentist This translates into the services of 365 full-time hygienists The dentists anticipated that future unmet needs for such services would increase to 10 3 hours per week per dentist in the next year, or about 700 additional full-time hygienists
However, it should also be noted that, at the time of the survey, there were 1,713 dental hygienists licensed and residing in Virginia, 22 percent of whom were not currently working in the field Current reports from the Department of Health Professions indicate that there are now 2,196 dental hygienists licensed and residing in the Commonwealth, an increase of 483 Data is unavailable to determine what proportion of this current population is not working in the field

Another measure of a manpower shortage is the number of available positions that go unfilled and the length of time required to fill a position The study found that at the time of the survey, 25 percent of the dentists responding were actively seeking hygienists, and 37 percent had sought hygienist services within the past 12 months The dentists also reported that of those who had hired hygienists within the past 12 months, three-fifths had filled positions within two months

However, some dentists took much longer to fill positions, bringing the average time to fill a position to 14 weeks

The study concluded that although dentists perceive a need for more dental hygienists, many have adapted to the shortage and are coping with the situation Some dentists who indicated a need for more hygienist services were not actively trying to fill that need Of those who indicated that they had sought to fill a position within the past 12 months, half had not advertised in newspapers and 90 percent had not contacted employment agencies The study stated that "overall, the current situation looks more like a seller's market than a serious labor shortage "

Area Health Education Centers, Dental Work Force Report, 1994

This study found that 41 cities and counties in the Commonwealth fully or partially meet federal criteria for designation as dental manpower shortage areas The designation considers areas having a dentist-to-population ratio of less than 1 5,000 The 41 areas identified have a dentist to population ratio of 1 7,790 The following counties were federally designated dental manpower shortage areas at the time of the AHEC report Brunswick, Buchanan, Charlotte, Craig, Greene, Henry, King and Queen, Louisa, Patrick, Rappahanock, Russell, Scott, Southampton and Surrey In addition, the following cities or counties have fewer than one dentist for each 5,000 inhabitants Albemarle, Alleghany, Amherst, Augusta, Bedford County, Campbell, Caroline, Charles City, Cumberland, Dickinson, Dinwiddie, Halifax, Henrico, James City, King George, Lunenburg, Manassas Park, Pittsylvania, Poquoson, Prince George, Pulaski, Richmond County, Roanoke County, Rockbridge, Spotsylvania, Stafford, and Wythe

It should be noted that the study reflects a shortage of dentists but does not directly address the availability of hygienists However, the survey included a survey of dentists practicing in Virginia in which the dentists in each of the AHEC regions of the state indicated a need for more dental hygienists It should also be noted that the areas identified as dental manpower shortage areas roughly correspond with federally designated health professional shortage areas, indicating that the areas tend to be underserved with respect to all health care providers Since dental hygienists are required to work under the supervision of a dentist requiring the dentist's physical presence, there are fewer positions for dental hygienists where there are fewer practicing dentists

Dental Hygiene Practice Survey, 1995

The Virginia Dental Hygienists' Association undertook an examination of the practice of dental hygiene in Virginia in which all licensed dental hygienists in the state were surveyed The information in this survey is instructive in how dental hygienists perceive their practice, particularly those who are no longer working in the field Of those responding that they were no longer working as hygienists, the most frequently cited reason was child care or family responsibilities Also frequently cited were boredom, career changes, lack of benefits, concern regarding exposure to infectious diseases and unsuitable pay Only three individuals responding

to the survey indicated that they were not working as hygienists because they were unable to find a job

Conclusion

Based on information compiled from the reports described above, dentists' perception of a shortage of dental hygienists in the Commonwealth is supported by the very low number of hygienists reporting that they are involuntarily unemployed or under-employed--0 3 percent of those responding to the Virginia Dental Hygienists Association's 1995 survey However, the shortage may be impacted by a maldistribution of dental hygienist services, since certain portions of the state are disproportionately affected

Many dental hygienists do not work full time, and a significant proportion of those licensed as dental hygienists do not currently work in this field Many of the dentists who indicated a need for additional services did not indicate a need for a full-time hygienist

Accreditation Standards for Dental Hygiene Educational Programs

The subcommittee reviewed two publications of the American Dental Association's Commission on Dental Accreditation -- "Accreditation Standards for Dental Hygiene Education Programs" and "New Faces for Allied Dental Education Ideas for Innovations in Allied Dental Education Programs," published in 1992 and 1990 respectively

Proposals for expanding dental hygiene education opportunities focused on already accredited schools expanding their programs through the use of telecommunications or mobile programs which would relocate periodically as a local need for hygienists is met The following accreditation standards may be of particular concern to such programs

Standard 5, Curriculum, 5 3 4 1, Clinical Dental Hygiene The basic clinical education aspect of the curriculum must include a formal course sequence in scientific principles of dental hygiene practice which extends throughout the curriculum and is coordinated and integrated with clinical experience in providing dental hygiene services Students' basic clinical education must be provided in the program's clinical facilities as defined in the accreditation standards

Clinical procedures must include student and faculty assessment of each patient's systemic and oral health before dental hygiene services are initiated Faculty members must be present during all sessions to integrate social, basic, dental and clinical sciences with patient experiences A dentist must be available to provide supervisory, diagnostic, consultative, and referral services The dentist's role during clinical sessions must be defined

The number of hours of clinical practice scheduled must be based on the clinical services provided in the curriculum A first-year student should have at least six hours of clinical practice a week in the preclinical dental hygiene course As the first-year students begin providing dental hygiene services for patients, each student should be scheduled for eight to 12 hours of clinical

practice time a week Each second-year student should be scheduled for at least 12-16 hours of practice with patients a week in the dental hygiene clinic

Standard 7, Faculty. 7 1, Qualifications Dental Hygiene program faculty members must have current knowledge of the specific subjects they are teaching and background in educational methodology

Faculty must have an understanding of education theory and practice, e g , curriculum development, educational psychology, test construction, measurement and evaluation Faculty members should hold a degree at least one level higher than the degree to be granted to their students or they should be currently working on attaining such a degree

Faculty who provide preclinical and clinical instruction must have knowledge of current concepts of dental hygiene, clinical instruction and evaluation as well as proficiency in clinical dental hygiene and clinical practice experience Dentists and dental hygienists providing supervision of students' clinical procedures must have qualifications which comply with the state dental or dental hygiene practice act

Standard 8, Facilities. 8 1, Clinic An adequate clinical facility must be provided The number of clinical stations should be based on the number of students admitted to class If the number of stations is less than the number of students in the class, there must be one clinical station for every student scheduled for each clinical session There must be sufficient flexibility in course scheduling to allow adequate time for preclinical and clinical instruction and practice The number of dental hygiene faculty must be increased to compensate for additional preclinical and clinical sessions which would be required

8 2, Radiographic Facilities The radiography facilities must be adequate for student practice Radiography exposure rooms must be large enough for use in demonstrations and supervised practice of techniques, and must be adequately equipped Darkroom capacity and equipment should provide for simultaneous use by several students in meeting their needs for learning processing procedures as well as actually processing the film

8 6, Extended Campus Facilities Although it is preferable and therefore recommended that the educational institution provide physical facilities and equipment which are adequate to permit achievement of the dental hygiene program's objectives, the institution may contract for use of an existing facility if conditions specified by the commission are met

A facility in the community may be used for basic clinical education In that instance, standards specified for program facilities must be met, and the following provisions must be met

1 There is a formal contract between the educational institution and the facility
2 A two-year notice for termination of the contract is stipulated to ensure that instruction will not be interrupted A contingency plan is developed by the institution should the contract terminate

3 The location and time available for use of the facility are compatible with the instructional needs of the dental hygiene program
4 The dental hygiene program administrator retains authority and responsibility for instruction and scheduling of student assignments
5 Clinical instruction is provided and evaluated by dental hygiene program faculty
6 All dental hygiene students receive comparable instruction in the facility
7 The policies and procedures of the facility are compatible with the philosophy and goals of the educational program

The Committee also heard from a representative of the American Dental Association Council on Accreditation who answered questions regarding applicability of the standards to the subcommittee's proposals

Education Programs for Dental Hygienists in Virginia

Virginia's colleges currently support five dental hygiene education programs of which three are two-year programs and two are four-year programs The four-year programs are offered by the Virginia Commonwealth University School of Dentistry in Richmond and by Old Dominion University in Norfolk The two-year programs are offered by Northern Virginia Community College in Annandale, Virginia Western Community College in Roanoke, and Wytheville Community College

Virginia Commonwealth University School of Dentistry The college receives between 40 and 55 qualified applications each year for the school's 18 first-year openings The school does not limit applications to students from a given service area However, most applicants are from Virginia, as are most of the students accepted

Old Dominion University The school received 45 qualified applications in 1994 and 61 qualified applications in 1995 for 30 openings Additional funding was approved to increase the 1996 class size to 48 positions The school received 58 qualified applications in 1996 Applications are not limited to those from a specific geographic area, although most of the applicants are from the Hampton Roads area

Northern Virginia Community College The school can accommodate 20 students in each beginning class, and in the past three years has received approximately 60 applications each year for the 20 openings The school accepts only applications from Virginia residents, but does not limit applicants to the school's traditional area of service The school also indicated that in the past two or three years, graduates have faced increased difficulty in finding full-time employment

Virginia Western Community College The college receives 50-60 qualified applications each year for the school's 18 openings Each year all 18 openings are filled The program's service region includes Roanoke, Richmond, Charlottesville, Lynchburg, and Martinsville-Danville The school does not limit its applications to the school's traditional service area because of the limited number of dental hygiene programs in the state The school does not maintain a waiting list but accepts students each year based on the strength of their applications Responses from both the

Wytheville and Virginia Western Community Colleges indicate that full-time dental hygiene positions are in short supply in these geographic areas Both schools also expressed interest in "distance learning" options which would allow expansion of the program into underserved areas

Wytheville Community College The program receives approximately 45-50 qualified applications a year from which 20 first-year students are admitted Students are placed on a waiting list if they are not immediately admitted to one of the 20 available clinical slots Applicants from the school's area of service are given priority The school has cooperative agreements with Mountain Empire, Virginia Highlands, Southwest, and New River Community Colleges, whose students are considered as being within the service area for the purposes of the dental hygiene program Students from other Virginia localities are given second preference and out-of-state students are considered only if there are no qualified Virginia applicants

Testimony from Public Hearings

The joint subcommittee held four hearings throughout Virginia in October 1996 The hearings were held at James Madison University in Harrisonburg, Danville City Council Chambers, Northern Virginia Community College in Annandale, and Old Dominion University in Norfolk Of the 112 people attending the Harrisonburg hearing, 26 offered testimony In Annandale, more than 100 people attended, 24 of whom offered comments Nineteen individuals addressed the joint subcommittee in Danville, Virginia, and 11 speakers testified in Norfolk Both dentists and dental hygienists were well-represented at all hearings

Speakers from the Norfolk area indicated that they do not suffer from a shortage of dental hygienists The Chair of the School of Dental Hygiene at Old Dominion University provided Bureau of Labor Statistics information that projected job openings for dental hygienists through the year 2005 can be met by the current rate of education and licensure Dentists from areas in which a dental hygiene school is located, such as Roanoke and Wytheville, also indicated that their area has an adequate number of dental hygienists In the Northern Virginia area, the dentists who addressed the subject agreed that a shortage of dental hygienists exists, while the dental hygienists testifying unanimously disagreed, citing the increased difficulty of recent graduates in finding full-time employment, as noted by the current educational programs However, Virginia's rural areas, including Southside, the Piedmont east of the mountains (Warrenton to Danville), and the Shenandoah Valley, appear to have a critical shortage of dental hygienists that has not been remedied by attempts to recruit hygienists from better-supplied areas of Virginia

Testimony from Dentists

Most of the evidence presented by dentists was anecdotal, based on their own recent experiences in attempting to fill dental hygienist positions Several speakers at each site mentioned significant costs involved in often-futile attempts to advertise an opening -- advertisements that provoked few, if any, responses Other dentists mentioned similar frustration when using placement agencies, including those sponsored by the Virginia Dental Association and the Virginia Dental Hygienists' Association Several speakers urged better communication

between the associations and between the existing dental hygiene programs to match job listings with job seekers

Dentists and hygienists appeared to be divided on the issue of full- versus part-time work Many of the hygienists testifying indicated that dentists rarely offered full-time job opportunities, while dentists testified that most hygienists preferred to work part-time In the Danville area, one dentist indicated that dental practices generally introduce the use of hygienists on a part-time basis and then increase the use of such services until the dentist has one or more full-time hygienists working Hygienists from the urban areas of the state testified that of the jobs recently advertised, most were for part-time openings, unusual hours or for temporary relief of existing staff

A dentist from South Boston testified that, in his area, there are 5,142 people for every practicing dentist, as opposed to one dentist for every 1,273 people for the state as a whole He stated that dentists in his area cannot adequately serve the population without hygienists' services, adding that only four of the area's 10 dental practices are taking new patients at this time These dentists would be able to see more patients if dental hygienists were available to do time-consuming prophylaxis and oversee the treatment of periodontal disease, thus freeing the dentist to provide other services

Several dentists from rural or otherwise underserved areas indicated that their practices were subject to months of disruption when a hygienist leaves the practice Dentists in dental manpower shortage areas testified that the services of dental hygienists were crucial to their ability to provide adequate service, but that dental manpower shortage areas may also be the most difficult areas to recruit hygienists to relocate or commute Dentists from these areas stated that efforts to recruit hygienists were unlikely to bring new dental hygiene practitioners to the area, but only succeeded in attracting hygienists from other local dentists' offices

Some dentists stated that a shortage of dental hygienists in their areas had concentrated most hygienists' services on cleaning teeth and left little time for treating the periodontal disease that afflicts a large proportion of the population (although dental hygienists explained that one of their major roles is the treatment of periodontal disease) Other dentists in dental manpower shortage areas testified that the shortage of hygienists may result in substandard care, as hygienists' schedules did not allow them to spend enough time with patients, or as hygienists were "double booked" with dental assistants providing part of the care In cases in which patients are double booked, patients may be treated by three people--the dental assistant, the hygienist, and the dentist, thus undermining the patients' continuity of care

Dentists testifying at Old Dominion University indicated that Norfolk and Virginia Beach have adequate numbers of dental hygienists However, dentists in the surrounding cities and counties, such as Smithfield, Suffolk and Williamsburg, indicated that they faced difficulty convincing dental hygienists to relocate or commute even relatively short distances Testimony from a dental hygienist who operates a temporary employment service buttressed this observation, stating that she knew of eight or 10 dental hygienists who were seeking full-time employment, but who were only interested in positions in Norfolk or Virginia Beach

The hearing at Northern Virginia Community College revealed that outlying areas of Northern Virginia face competition from the Washington, D C , suburbs when hygienists are willing to commute to Fairfax, Arlington or Alexandria from Fredericksburg and other outlying areas in order to secure higher salaries

Dentists and hygienists were united and unanimous in urging that any proposed solution to increase educational opportunities for those wishing to become hygienists meet the accreditation standards of the American Dental Association, and all opposed the preceptorship concept which equates to "on-the-job" training

Testimony from Dental Hygienists

Much of the testimony from hygienists was also anecdotal, based on reviews of classified advertising and their own experiences Particularly in areas in which dental hygiene schools are located, hygienists indicated that recent graduates require increasing time to locate a job and that few full-time jobs are available Particularly in the urban areas in which dentists acknowledged that the shortage was not acute, some hygienists expressed concern that increasing the number of hygienists may be intended to saturate the job market and deflate salaries

In rural areas, where many hygienists agreed with dentists that a shortage of dental hygienists exists, some hygienists were concerned that the graduation of just a few classes taught locally would saturate the existing market and that a permanent local program was not necessary

One dental hygiene educator noted that because 17 to 22 percent of licensed dental hygienists are not currently working as dental hygienists, dentists may wish to consider means of attracting these hygienists back into practice Studies by the American Dental Association and the American Dental Hygienists' Association found that the average career of a dental hygienist is 11 to 12 years Asked about the reasons for hygienists no longer practicing, dental hygienists indicated the following

- Family concerns, such as the birth of children or the relocation of a spouse's job, were the primary reasons, although hygienists may return to work as children enter school
- Job burnout, boredom, personality conflicts within the office and the lack of opportunity for upward mobility were cited
- Lack of benefits such as insurance, retirement, and paid vacations were cited, as well as the difficulty of finding a full-time job with a single dental practice Many dental hygienists who wished to work full-time pieced together a full-time job by working for two or more dental practices However, it should be noted that hygienists who work full-time for a single practice are more likely to receive benefits than those who work part-time, whether for one dentist or for several
- Other hygienists indicated that dental hygienists sometimes are not treated as the professionals that their skills and education warrant, and suggested that if individual dentists have difficulty recruiting or retaining hygienists, they may wish to consider this issue

Testimony Regarding Dental Hygiene Education Programs

At every hearing, potential dental hygiene students, including present dental assistants, attested to the difficulties they had encountered in gaining admission to existing dental hygiene education programs Long admission delays and long commutes to study under existing programs were cited as obstacles to education, particularly for potential students with family obligations Potential dental hygiene students also expressed concern that some current programs offered by community colleges limit enrollments to students from the community college's geographic area

Several rural dentists cited cases of students who relocated temporarily to attend existing programs and did not return after graduation They suggested that offering dental hygiene education in rural areas experiencing shortages may be the best means of ensuring that some graduating dental hygienists remain in the area However, educators stated that even if the graduates of programs in underserved areas do not stay in the area, those graduates would still have gained job skills and entry into a respected occupation that otherwise would not have been readily available to them

Several educators suggested using telecommunications to provide classroom instruction in dental hygiene education in underserved areas However, hygienists noted that telecommunications does not solve the problem of providing clinical instruction locally Several speakers at the hearings suggested local options for providing the clinical portion of the program, including using local hospital dental suites (i e , University of Virginia in Charlottesville), public health service facilities (i e Harrisonburg and Winchester), the facilities of programs with dental assistant education programs, and other extended campus facilities

Some educators testifying suggested applying for grant funds from sources such as the Virginia Health Care Foundation and the Robert Wood Johnson Foundation to improve dental care access for underserved populations There is a pending application from Western Virginia Community College with the Virginia Health Care Foundation for funding a distance learning program at Danville Community College

Ways, Incentives and Programs to Increase the Number of Dental Hygienists

Attract Nonworking Hygienists Back into the Field As noted above, as many as 22 percent of the licensed dental hygienists are not currently working in their profession Market forces may induce a portion of this population to resume working as dental hygienists

Increase the Size of Education Programs All of the education programs responding to the subcommittee indicated that the number of qualified applications received is at least double the number of first-year openings that each school offers However, some of the school responses indicated that efforts to increase the size of the programs are hampered by budget considerations and required faculty-to-student ratios in the clinical portion of the programs Each of the programs is limited by the number of clinical positions that the school features If funding for faculty were increased, the schools might be able to accommodate more students in nontraditional part-time evening or weekend programs

Provide Needed Educational Opportunities Through Distance Education The Virginia Community College System has been developing programs in several areas using technological methodologies including compressed video, courses via computer and multimedia self-contained courses Respiratory therapy is already being offered through distance education technology from a host community college to four distant sites Both Virginia Western and Northern Virginia Community Colleges, with existing dental hygiene programs, have expressed interest in developing this program The pilot program could be developed and delivered to three institutions as soon as fall, 1997 if funding were secured during the 1997 General Assembly Session

Allow Market Forces to Work In cases in which demand for workers in a given field exceeds supply, a combination of forces, including increased salaries, better benefits or more flexible working arrangements, will arise to meet the demand As noted above, the number of dental hygienists licensed and residing in Virginia increased by 483 between 1989 and 1996 Given that all of Virginia's education programs are currently at capacity, it appears that students would like to take advantage of the unmet demand for dental hygienists in Virginia

However, testimony during the subcommittee's public hearings indicated that rural dentists find it very difficult to recruit dental hygienists to commute or relocate Potential students, many of whom do not fit a normal student profile, from rural areas currently unserved by a dental hygiene education program are also hindered by the need to commute long distances or to relocate temporarily in order to attend an existing program

Expansion of current educational programs to nontraditional students through evening or weekend study may provide a means of meeting the demand without investment in additional hardware A combination of increased funding for faculty in existing programs and the relocation of existing programs to areas of greater need may also assist in these efforts

Conclusions

After reviewing information from public testimony, surveys, and health manpower shortage studies, the subcommittee agreed that there is a maldistribution of dental hygienist services in Virginia While the most critical shortages occur in rural areas identified as dental manpower shortage areas, even relatively urban areas, such as Harrisonburg, Danville, Lynchburg, Charlottesville and Winchester do not have a sufficient number of dental hygienists The shortage is most critical in rural areas in which there are insufficient numbers of dentists to serve the population With the assistance of dental hygienists, each dentist could serve a greater number of patients

Areas served by existing dental hygiene education programs do not appear to suffer from a shortage of dental hygienists In fact, in some areas such as Northern Virginia, Wytheville and Roanoke, the job market for dental hygienists is saturated, according to testimony offered by representatives of the dental hygiene schools

The demand for dental hygiene education is strong, and, even allowing for mitigating factors, the educational institutions offering such education have many more applications than positions The high cost of clinical facilities for expanding existing programs or creating new programs remains a challenge

Recommendations of the Subcommittee

Improve Job-Search Networks Currently the Virginia Dental Association, the Virginia Dental Hygienists' Association and the various dental hygiene education programs each make an effort to post job openings and to assist qualified job seekers However, according to public testimony, these networks do not always communicate effectively with each other The VDA and VDHA, in cooperation with Virginia's dental hygiene education programs, should create a unified job search network by sharing and updating information from all of these sources Such a network may alleviate some of the frustration faced by dentists and hygienists as they seek to fill positions or to find suitable employment opportunities Such a statewide network may also be a resource to assist nonpracticing hygienists who would like to resume work

Consider Reducing Obstacles to Licensure by Endorsement Presently, if an applicant graduates from an accredited dental hygiene program in another state and/or takes a clinical board examination other than the licensing test administered by the Southern Regional Testing Agency, the Board of Dentistry will not provide licensure by endorsement unless the applicant also has two years of clinical experience The Board of Dentistry may wish to revisit the issue of whether hygienists who have passed clinical exams approved by other states also should be required to have two years' work experience before licensure by endorsement will be considered

Provide Educational Opportunities Where the Need is Greatest The subcommittee recommends that the Virginia Community College System be funded for the development of a distance education program in dental hygiene that meets accreditation standards It further recommends that funding be provided for three community colleges to offer the a pilot program in regions that have shown a significant need The clinical portions of the program would be established using existing sites in public health facilities, hospitals, vocational education facilities and other extended campus facilities using qualified instructors at these locations These programs should be funded though the state general fund with support from grant funding sources such as the Robert Wood Johnson Foundation and the Virginia Health Care Foundation, community college education foundations and other private funding, if available Program development funding would be a one-time expenditure and pilot programs would be self-supporting after a three-year cycle

The quality of the education provided to dental hygienists is of the utmost importance Therefore, any changes to educational programs should come through increasing funding, not through decreasing educational standards

Explore Options to Attract Non-Working Hygienists Back Into the Field As noted in testimony to the committee, 17 to 22 percent of licensed dental hygienists are currently not working in the profession The Committee recommends that a survey of non-working hygienists be undertaken to ascertain what incentives might encourage this population to re-enter the workforce

Provide Incentives to Dental Hygienists to Work in Underserved Areas Incentives such as state-sponsored scholarships with a location work commitment, efforts by local community college education foundations, guaranteed full-time employment upon graduation agreed upon by contract, and efforts to encourage dental assistants to become dental hygienists should be considered

Improve Access to Programs Catchment area preferences for applicants to community college programs should be eliminated since funding for dental hygiene programs comes from state sources, not local, and two of those localities admittedly are saturated

Expand Existing Programs to Non-traditional Students Many individuals who would like to become dental hygienists are hampered by their need to maintain full-time jobs and to meet family responsibilities These non-traditional students could be served if programs offered part-time studies in the evenings and on weekends This option would also reduce the expense of increasing program size by using clinical facilities at times that they are not currently in use However, funding for additional faculty and supplies would still be required

Respectfully Submitted,

John J Davies, Chairman
Whittington W Clement
Julia A Connally
William S Moore, Jr
Warren E Barry
W Henry Maxwell
Edward L Schrock
Dr Mark Crabtree
Dr Joy S Graham
Margaret Lappan Green
Anne B Hutcherson
Dr William J Viglione

Membership
Joint Subcommittee Studying the Availability of Dental Hygienists
House Joint Resolution 81

The Honorable John J Davies, Chairman
Member, House of Delegates

The Honorable William S Moore, Jr
Member, House of Delegates

The Honorable Whittington W Clement
Member, House of Delegates

The Honorable Julia A Connally
Member, House of Delegates

Margaret Lappan Green
Virginia Dental Hygienists Association

Anne B Hutcherson
Director, Dental Hygiene Program
Virginia Western Community College

The Honorable Warren E Barry
Senator

The Honorable W Henry Maxwell
Senator

The Honorable Edward L Schrock
Senator

Dr Joy S Graham
Virginia Community College System

Dr William J Viglione
Virginia Dental Association

Dr Mark Crabtree
Virginia Board of Dentistry

Staff
Lyn Hammond
Division of Legislative Services

Kendall C Patterson
Division of Legislative Services

Appendix One

HJR 81: Joint Subcommittee Studying the Availability of Dental Hygienists

Public Hearing, October 2, 1996
Danville City Council Chamber, Danville, Virginia

More than 30 people attended the October 2, 1996, public hearing at Danville City Council Chambers in Danville, Virginia Both dentists and dental hygienists were represented with dentists outnumbering dental hygienists approximately two to one Eighteen people offered testimony to the subcommittee, all but three of them either dentists or hygienists

Most of the speakers were from the South Side Virginia area, including Danville, Martinsville, Halifax and South Boston However, speakers were also present from Lynchburg and Roanoke

Availability of Dental Hygienists

Dentists described their efforts to hire dental hygienists, including advertising in newspapers, contacting dental schools directly and contacting an employment "network" However, all dentists testified that newspaper advertisements were not productive, nor were recruiting efforts at the dental school at MCV in Richmond Other dentists described hiring dental hygienists to commute from Durham, North Carolina and recruiting as far away as Johnson City, Tennessee A few dentists indicated that in an area with a critical shortage of dental hygienists, advertising did not attract new hygienists to the area, and, at best, would only "steal" a dental hygienist from another local office Dentists also indicated that it is particularly difficult to recruit hygienists to relocate to a rural area

Several dentists indicated that the shortage of hygienists in the South Side area compounded the problem of a shortage of dentists Dental hygienists' service were believed to help dentists serve a greater number of patients, particularly in areas such as South Boston, where there is one dentist for every 4,800 in population, one fourth the average in Virginia One dentist indicated that the shortage of dental hygienists may prompt substandard care as hygienists had less time to spend with patients or hygienists were double-booked with dental assistants providing part of the patients' care

In contrast, one dentist indicated that he has been able to fully staff his office and employ one full-time and three part-time hygienists by paying them what they request and allowing the hygienists to control their own patient schedules

Several dentists indicated that they risk their ability to control their patient schedules when hygienists in their employ quit or take leaves of absence for family or health reasons In such

cases, dentists testified that they are faced with rescheduling appointments months later than originally planned Other dentists testified about not being able to discipline or fire poorly performing hygienists because those employees could not be replaced

Few of the hygienists testifying disputed that there is a critical shortage of dental hygienists in the Southside Virginia area However, some expressed concern that the job market for dental hygienists in the area could easily be glutted with the graduation of just a few classes, and that such a glut may reduce salaries and job opportunities for hygienists One dentist concurred that there can be a relatively thin margin between a shortage and an oversupply of dental hygienists, depending on the locality

The committee heard that the shortage may be addressed, in part, by encouraging dental hygienists who are no longer practicing to reenter the field Dentists testified that the average career of a dental hygienist was only ten years Asked about the reasons for hygienists no longer practicing, dental hygienists indicated the following

- Family concerns, such as the birth of children or the relocation of a spouse's job were the primary reasons, although hygienists may return to work as children entered school
- Job burnout, boredom, personality conflicts within the office, and the lack of opportunity for upward mobility were cited
- Lack of benefits, such as insurance, retirement and paid vacation were cited, as well as the difficulty of finding a full-time job with a single dentist Many dental hygienists who wished to work full-time pieced together full-time jobs by working for two or more dentists

One hygienist indicated that dental hygienists often are not treated as professionals within the dentist's practice She noted that dental hygienists are part of a patient-care team, and that hygienists should be treated as the professionals that their education and skills indicate Dentists concurred and stressed that dental hygiene is a good job opportunity, offering good salaries and flexibility to work full or part-time Some speakers also stated that even if dental hygiene students educated locally do not remain in the area, that south side area youth could benefit from job opportunities in other parts of the state

Dental Hygiene Education

The chairman asked those testifying to focus on how the General Assembly could help to alleviate a shortage of dental hygienists Most speakers indicated that educational opportunities should be made available locally for those wishing to become dental hygienists Of particular concern were the limited number of openings for dental hygiene students, long commutes for south side residents to attend one of the existing education programs, and the likelihood that students who leave the area to study will not return after graduation

A student at Patrick Henry Community College spoke of her efforts to be accepted by the dental hygiene education program at Western Virginia Community and expressed concern about the lack of openings for students wishing to become dental hygienists Two representatives of Danville Community College described a distance learning program that the community college

wished to establish in cooperation with Western Virginia Community College in order to offer dental hygiene education locally

Paula Johnston, an associate professor in the dental hygiene program at Virginia Western Community College described that college's program She reported that the school graduates 16 to 18 students per year, most of whom are not from the Roanoke area The program expanded its service area to accept students from areas in which the shortage of dental hygienists is most acute Many of the program's students are non-traditional -- they are older than the average student, currently work or have significant work experience, and have family responsibilities Most of the students commute or relocate temporarily in the Roanoke area In response to questions, she indicated that many of the program's students come from Waynesboro, Martinsville, Danville, Crozet, Harrisonburg and Basset Most of the graduates do not start in full-time jobs, instead combin part-time positions with more than one dentist The average starting wages are $150 to $175 per day and because the positions are part time, no benefits are included The school does not maintain a waiting list, but instead considers each year's applications competitively During admission interviews, students are questioned about whether they intend to work in their home areas, and that a "yes" answer is viewed favorably

Ms Johnston also noted that Virginia's existing dental hygiene education programs are at capacity and receive many more qualified applicants than they can admit She suggested that the committee consider expanding existing programs by offering evening programs and though the use of distance learning technology, such as that proposed by Virginia Western and Danville Community Colleges

Anne Hutcherson, a study committee member and the head of the dental hygiene program at Virginia Western Community College, advised those in attendance that not everyone who wishes to be a dentist or a dental hygienist has the academic ability to succeed When a student does not succeed or quits the program, the school loses an investment and a scarce opening for a dental hygiene student goes unfilled She stated that the program and interested dentists should work together to recruit students with the ability to succeed

Representatives of Danville Community College requested that the committee consider a cooperative joint venture between Danville and Virginia Western Community Colleges in which students would receive instruction during the first year at Danville Community College and pre-clinical study using the facilities of George Washington High School Students would travel to Roanoke for clinical study during the second year of the program Danville community college had been approved for a dental hygiene program in 1991, but the funding for the program was never provided The proposed partnership with Virginia Western Community College would cost only $300,000 instead of $600,000 for the program proposed in 1991

Two dental hygienists expressed concern about the clinical component of the proposed distance learning program, indicating that the many hours spent in clinic as part of their education would not be possible if the proposed program were limited to using available clinical facilities during evening hours Another hygienist stated that the camaraderie with other students was an

important part of her education and that she was concerned that students would not be able to learn from each other if they receive their clinical education in groups of two or three

Several hygienists indicated that they had received their education at Guilford Technical School in North Carolina, a commute of over an hour each way Several speakers noted that the long commute to existing programs presented difficulties for non-traditional students who work full-time and for single parents who must support or care for children Another hygienist stated that the rural areas of the Commonwealth need better access to health care, but that they don't need poorer quality education for rural health care providers

Many of the dentists testifying indicated that they would be willing to volunteer services to provide the legal coverage necessary for a local clinical component The proposed distance learning program has the support of the local dental association and has received pledges of funding and volunteer support

In conclusion, the chairman thanked those in attendance for their participation and comments He added that the full study committee would be meeting in the near future to compare the testimony from the four public hearings, and that he was hopeful that means of increasing access to dental hygienist services for rural Virginia could be found

Appendix Two

HJR 81: Joint Subcommittee Studying the Availability of Dental Hygienists

Public Hearing, October 2, 1996
Old Dominion University, Norfolk, Virginia

Eleven speakers attended the October 2, 1996 public hearing at Old Dominion University in Norfolk, Virginia Seven dentists and four hygienists addressed the Committee Speakers represented Tidewater areas, including Williamsburg, Suffolk, Smithfield, Norfolk, Portsmouth, and Virginia Beach

Availability of Dental Hygienists

A representative of the dental hygiene education program at Old Dominion University shared Bureau of Labor Statistics information indicating that the need for dental hygienists was expected to increase of 41% between 1990 and 2005-- twice the rate of growth for other professions The American Dental Hygienists' Association estimates that approximately 22% of licensed dental hygienists are no longer working in the field Of those working as dental hygienists, 52% work full time and the remainder work part-time The Bureau of Labor Statistics estimates that the projected job openings can be met by the current rate of education and licensure

The dentists from Norfolk and Virginia Beach testified that there is not a significant shortage of dental hygienists in their areas due to the proximity of the ODU Dental Hygiene Program However, dentists in areas outlying the major urban centers indicated that they and their colleagues had experienced difficulty hiring dental hygienists willing to commute A dentist from Williamsburg reported that he found it easier to hire a dentist to provide dental hygiene services than to hire a hygienist at the same salary One dentist suggested that rather than a shortage of hygienists, the problem was one of maldistribution, and that it may be necessary to increase the number of hygienists overall to overcome the maldistribution

Some dentists stated that the shortage of dental hygienists in outlying areas prevents hygienists from providing some services, such as the treatment of periodontal disease, because they must spend all their time cleaning teeth Another dentist stated that greater availability of dental hygienists would help to counter the cost containment measures of managed care insurance plans by providing more efficient and lower-cost services

One dental hygienist reported on a job "call list" established to match job- seeking hygienists with job-offering dentists She indicated that most of the hygienists who called were looking for part-time days, while the dentists had both part-time and full-time positions to offer

Some dentists call from as far away as Winchester, Virginia She also provided a 1994 survey of Tidewater area hygienists which indicated that the average daily payment for hygienists in 1994 was $163 in 1994, and that the following benefits are provided

Paid Vacation --	71 5%
Paid Federal Holidays	36 6%
Paid Sick Days	51 1%
Retirement Plan	24 7%
Dental Care for Self	76 9%
Family Dental Care	52 7%
Medical Insurance	17 7%
Life Insurance	09 1%

A dental hygienist operating a temporary employment service reported that the Norfolk and Virginia Beach areas did not appear to have a shortage of dental hygienists, but that Williamsburg and Suffolk appear to have a more serious problem She stated that she knew of 8 to 10 hygienists at this time who are looking for employment, but that most preferred jobs in the Norfolk or Virginia Beach area

Education

Several dentists suggested that if individuals in rural areas must relocate in order to receive training, that they may not return to the rural area after completing their training They suggested that in order to make more dental hygienists available in rural areas, training should be provided locally

A representative of the ODU dental hygiene program suggested that a telecommunications option offered by ODU--Teletechnet--be employed to provide classroom instruction in rural areas The clinical portion of instruction remains a problem, and may be addressed through the use of mobile trailers or by providing instruction in local dentist offices Another speaker suggested that the Committee consider a program in Kentucky that moves the entire education program to a new site every few years

Some speakers suggested that dentists in rural areas provide scholarships for local students who agree to return to the area to practice

Appendix Three

HJR 81: Joint Subcommittee Studying the Availability of Dental Hygienists

Public Hearing, October 2, 1996
Northern Virginia Community College, Annandale, Virginia

Over 80 people attended the October 2 public hearing at Northern Virginia Community College (NVCC) at Annandale The HJR 81 Joint Subcommittee was represented by Del Judy Connally, who chaired the hearing, and Dr Joy Graham, Assistant Chancellor with the Virginia Community College System

Twenty-four people spoke at the hearing, all but two of them either dental hygienists or dentists A dental assistant, who wished to become a dental hygienist, lamented the lack of openings in the dental hygienists program at NVCC, and an administrator from that school explained the reasons for the backlog of applicants and the resulting long waiting list

All of the speakers were from Northern Virginia or from areas immediately adjacent (e g , Fredericksburg, Loudoun County, Leesburg)

Ten dentists and 12 dental hygienists testified In addition, four dentists, who were unable to attend, submitted written statements Both the dentists and the dental hygienists displayed remarkable unanimity in their opinions on the issues The tone of the remarks varied from conciliatory to adversarial

Availability of Dental Hygienists

To a man, the dentists who addressed the issue of a hygienist shortage agreed that a shortage in the Northern Virginia area exists To a woman, the dental hygienists disagreed

The dentists' evidence for the existence of a shortage was almost wholly anecdotal, based on their own recent experiences in attempting to fill dental hygienist positions Several speakers mentioned significant costs involved in often-futile attempts to advertise an opening--advertisements that provoked few, if any, responses Other dentists mentioned similar frustration when using placement agencies, including those sponsored by the Virginia Dental Association and the Virginia Dental Hygienists' Association

Much of the dental hygienists' counter-arguments were also based on personal experience Dental hygienists looking for a job mentioned the lack of available positions in Northern Virginia, especially full-time jobs Several noted the prevalence of part-time positions, attributing the phenomenon to dentists' reluctance to provide the benefits that are customarily offered to full-time employees Several dental hygienists also provided more "empirical" evidence to buttress their arguments, ranging from American Dental Association surveys of dental hygiene school admissions to a survey of *Washington Post* classified advertisements over the past year All such evidence purported to show that a shortage of dental hygienists in Northern Virginia (or in the Commonwealth generally) simply does not exist

The dentists and hygienists similarly disagreed on the corollary issue of compensation If a shortage exists, one dental hygienist pointed out, the law of supply and demand would cause an upward spiral in dental hygienists' salaries According to the hygienists, such a spiral has not occurred, with most salary increases barely covering increases in the cost of living and with salaries generally "stagnating " The dentists, on the other hand, contended that salaries *have* increased and that the starting pay they must offer to new dental hygienists has gone up dramatically Several dentists noted the relatively generous salaries available to largely inexperienced people with only two years of post-secondary education However, dental hygienists noted that people in other high-demand areas, such as computer programming, command equally high salaries

Several dental hygienists mentioned "license by endorsement", by which our-of-state hgienists can practice in Virginia, as a partial solution to the perceived shortage of dental hygienists One such hygienist, however, described her experiences in obtaining such a license, which included substantial time, effort, and expense

Education

The discussion frequently veered toward the issue of dental hygiene training programs, particularly the program at NVCC An NVCC official stated that in 1996, 160 people applied for admission to the program, which admits 20 per year Assuming no change in the number admitted and no discouraged applicants dropping out, this amounts to a eight-year waiting list

Most of the dentists at the hearing favored expanding training programs to increase the supply of dental hygienists Several mentioned the need for more "flexible" programs, including evening classes, to accommodate the needs of potential students--almost 100 percent female, many with young children, often pursuing training for a second career while still employed

The dental hygienists were largely silent on the issue of new or expanded dental hygienists training programs The dental assistant from Fredericksburg explained her disappointment at being faced with the long waiting list at NVCC

All dentists and dental hygienists agreed than any expansion of dental hygienist training programs should not result in a degradation of the dental hygienists training nor a lowering of standards

The NVCC administrator explained the college's exploration of innovative ways of providing enhanced dental hygienists training programs "Distance learning" programs, in which satellite and telecommunications technology would be used to provide training to students in distant parts of the Commonwealth, are an option, albeit one hampered by the clinical component of dental hygiene training A more mundane option, evening classes, was also discussed

Conclusions

- Clearly, dentists and hygienists disagree on whether a shortage of dental hygienists exists

- The "shortage," if it exists, seems particularly acute in fringe areas, such as Fredericksburg and Sterling This may be explained partially by dental hygienists from those areas commuting a relatively short distance for higher salaries, leaving the dentists in the fringe areas with the choice of paying higher salaries or doing without hygienists

- The demand for dental hygiene education appears strong, and, even allowing for mitigating factors, the educational institutions offering such education have substantial waiting lists The high cost of increasing the number of students in hygiene programs, however, remains a difficult problem

- The previous studies distributed to members of the joint subcommittee suggest that the current situation is more a "seller's market" than a real shortage The anecdotal evidence presented at the Annandale public hearing seems to support this view

Appendix Four

HJR 81: Joint Subcommittee Studying the Availability of Dental Hygienists

Public Hearing, October 2, 1996
James Madison University, Harrisonburg, Virginia

More than 100 individuals attended the public hearing at Taylor Hall, James Madison University on October 2, 1996 Twenty-six individuals offered testimony to the joint subcommittee Present were Delegate Butch Davies, Chair, and Dr William Viglione of Charlottesville There were a variety of recommendations made regarding the expansion of dental hygienists' educational opportunities Most speakers urged targeting the areas of the Commonwealth where shortages occur All speakers urged that any program developed be accredited

The availability of dental hygienists' services and access to dental hygiene education were two major points made during the meeting Speakers urged the development of a mobile program similar to Kentucky's or, in the alternative, the expansion of existing programs

Availability of Dental Hygienists

Speaker after speaker stressed that a shortage of dental hygienists existed in the Valley area and more specifically the area described as Region 7 of the Virginia Dental Association Dentists described spending thousands of dollars to advertise job openings, but receiving no response Some dentists indicated that they had offered to pay educational expenses for individuals willing to study dental hygiene in order to attract more hygienists to the area

Some dentists testified that some areas face significant competition from the Northern Virginia area because hygienists are willing to commute relatively long distances for the higher pay offered in that area Issues related to the full- and part-time employment of hygienists were also discussed--with some dentists describing difficulties in hiring hygienists who wished to work full time, while some hygienists indicated difficulty locating full-time positions

The subcommittee also heard testimony regarding job referral networks Several speakers urged better communication between hygienists and dentists Testimony indicated that the current job referral system operated by dentists and hygienists suffered from poor communications

An employee referral service in the Winchester area was described Karen Avery, a past president of the Virginia Dental Hygienists' Association, said that the local organization serves as a clearing house for employment opportunities Representatives of dental hygiene schools stated that the schools can also assist with the employment networks Dr Elizabeth Dorwalt indicated that she works with the local dental association in making referrals to the employment network, but that dentists receive few referrals from the network

Education Programs

A number of speakers, especially dental assistants who spoke, noted that programs need to be more centrally located and that individuals cannot commute two to three hours for education Parents who wished to become dental hygienists stated that they could not commute long distances and that a program within a one-hour driving range is the maximum that is reasonable Several dental assistants noted that they have applied to dental hygiene programs and were told that they faced a four-year wait for admittance into such a program They stressed their family responsibilities and indicated that with the community college system and technology available that they ought to be able to go to school within a reasonable distance of their home

Several speakers urged that there be an affiliation with existing programs and that new schools be used, such as Blue Ridge Community College, Lord Fairfax Community College, Piedmont Community College, and other branches of Northern Virginia Community College James C Gordon, Jr , who previously served on a study committee of this issue for five years, noted that a recommendation was made to put facilities in the Danville and Lord Fairfax Community Colleges, but that funding had not been provided to carry out the recommendation

Speakers from a widespread area, from Wytheville and Winchester to Madison County and Charlottesville all addressed a lack of access to educational opportunities for those wishing to study dental hygiene Cathy Jones of Madison described her daughter's efforts to gain admittance to the dental hygiene program at Virginia Western Community College She was advised that of the 80 people who applied to the program, sixty were interviewed and only 16 were admitted Her daughter wishes to pursue education in dental hygiene, but faces a two-year waiting list One speaker noted that long school waiting lists are not unusual and that this could improve the quality of applicants and reduce attrition in the program by "weeding out" those who are not as interested in the program

Martha Roberson, the president of the Virginia Dental Hygienists' Association outlined a number of issues and urged that the committee evaluate existing programs and related costs She noted that although the Old Dominion University Teletechnet program could offer classroom education through telecommunication, the program does not provide the clinical component necessary for graduation and licensure She voiced strong concern about the start-up costs for new facilities and asked about the possibility of serving additional students at existing programs through evening hours or using public health clinic facilities during evening hours Although these options would require additional funding for faculty, they would avoid costs for additional clinical equipment

Patricia Bradshaw, the director of the Wytheville Community College dental hygiene program served as an informational resource and responded to questions about dental hygiene education

A number of individuals asked why the community college system had not responded to the need for more educational opportunities, noting that the availability of sufficient numbers of

dental hygienists is a quality-of-care issue Such educational programs generate job opportunities and, if offered locally, encourages those trained in the area to practice in the area Some speakers stated that area residents who travel to other areas for education do not return to the area

One dentist suggested that public health department clinical facilities could be used to provide clinical education He testified that the number of public health dentists from Lexington to Harrisonburg had declined from seven to three and were expected to decline further Others noted that clinical chairs were available in Harrisonburg, Lynchburg High School, and Winchester Another dentist suggested using clinical chairs at the University of Virginia Hospital Individuals from Lexington, Staunton, Waynesboro and Harrisonburg indicated that a program in Charlottesville would be centrally located to all these areas, reducing commuting times for potential students

Several speakers urged that innovative solutions be examined They requested additional information about the requirements to operate an accredited program and whether dentists' offices, clinics, and existing facilities in high schools could be used to provide the clinical component of the program No speaker disputed the need for additional dental hygienists in the areas from Lexington to Winchester and from Lynchburg to Northern Virginia

All speakers emphasized that any program offered must be accredited and that quality of education must not be decreased in order to increase the number of dental hygienists

Informational Resources Used for HJR 81

An Assessment of the Need for Dental Auxiliaries in Virginia 1990 Prepared for the Virginia Dental Association by the Survey Research Laboratory, Virginia Commonwealth University, Richmond, Virginia

Accreditation Standards for Dental Hygiene Education Programs 1992 American Dental Association Commission on Dental Accreditation, Chicago

American Dental Association Council on Dental Education 1990 *New Faces for Allied Dental Education Ideas for Innovations in Allied Dental Education Programs*, Chicago

American Dental Association *1995/96 Survey of Allied Dental Education, Annual Report* Chicago, 1996

"*Dental Work Force Distribution and Productivity Report a Report to the Area Health Education Centers' Oral Health Task Force*," Virginia, 1994

Virginia Department of Health, Richmond, August 1996 *Medically Underserved and Health Professional Shortage Areas in Virginia*

U S Department of Health and Human Services, Division of Shortage Designation, Bureau of Primary Health Care, Bethesda, Maryland, 1994 *Guidelines for Health Professional Shortage Areas*

Deanne Shuman, Old Dominion University, Norfolk, Virginia, January 1995 *1994 Dental Hygiene Practice Survey in the Commonwealth of Virginia*