

Approved: February 23, 1999  
Date

MINUTES OF THE HOUSE COMMITTEE ON HEALTH AND HUMAN SERVICES.

The meeting was called to order by Chairperson Garry Boston at 1:30 on February 3 at the Dillon House.

All members were present except: Representative Brenda Landwehr, Excused

Committee staff present: Emalene Correll, Kansas Legislative Research  
Norman Furse, Revisor of Statutes  
June Evans, Committee Secretary

Conferees appearing before the committee: Margaret LoGiudice, RDH, MS, Johnson County  
Community College  
Ted White, Ph.D., Johnson County Community College  
Dr. Mikel Ary, President, Colby Community College

Others attending:

The Chairman welcomed everyone to the Dillon House and stated this was the first committee to meet at the Dillon House.

Ted White, Ph.D., Johnson County Community College, gave a report of the Dental Hygienist Training Committee required in **HB 2724**. The committee addressed the charge and also the underlying issue, endorsed by both dentists and dental hygienists, of providing access to quality dental care to all Kansans. 36 counties are without the services of a practicing hygienists while only 13 counties are without the services of a practicing dentist. The shortage of dental hygienists affects the ability of dentists, particularly in rural Kansas, to deliver care.

The following are recommendations made by the Committee: (1) Change the way dental hygiene programs are funded, from reimbursement per credit hour to a formula through which the state pays 85% of the cost of the program and the student pays 15%. (2) Establish a State Education Fund for tuition reimbursement for hygienists who agree to practice in areas identified by the Kansas Dental Board as underserved. (3) Change the Kansas Dental Practice Act to make it easier for dental hygiene practitioners to relocate and to reenter practice. (4) The Kansas Dental Board should accept the clinical board examination results for graduates of accredited dental hygiene education programs from all regional and individual states' examinations. (5) Change the Kansas Dental Practice Act to allow dental hygienists to work with dentally indigent patients under less restrictive supervision in clinics for the medically underserved, in nursing homes, and in hospitals. (6) Establish one new dental hygiene education program. (7) Increase access to out-of-state dental hygiene programs through student exchange, cooperative agreements, and tuition reimbursement programs. (8) Establish a representative committee to gather more specific information on the current dental care situation in Kansas through the implementation of surveys and research, and in monitor/evaluate the effects of the changes implemented in the Kansas Dental Practice Act. (See Attachment #1)

Dr. Mikel Ary, President, Colby Community College, stated the Kansas Dental Association came to them 3 or 4 years ago saying there was a shortage of dental hygienists in Kansas and a dental hygienists school was needed in the Western area. It is hoped if the students go to school in the Western area they will stay there and find employment there. After review and visiting North Central Technical School in Wausau, Wisconsin, of how to set up the program, it was decided Colby Community College would be affiliated with North Central Technical School via telephone line hookup. North Central Technical School has 90% of their students accredited. They have perfected their program and Colby is very pleased to be affiliated with them. North Central's total enrollment is 4,000 for all of their programs. Colby has three students enrolled in the dental program this year, but have many inquiries and the program can accommodate 12 students at the present time and eventually will be able to have an enrollment of 18. Due to the Board of Regents not approving the program until June 24, 1998, Colby was unable to advertise until then. It has been very expensive to set up the program and it is not cost effective for the school; however, Colby Community College is providing a need to the area. (See Attachment #2)

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON HEALTH AND HUMAN SERVICES, Room 423-S of the Capitol at 1:30 p.m. on February 3, 1999.

Emalene Correll, staff, gave a briefing on **HB 2074** relating to HIV infection. (See Attachment #3).

The Chairperson announced the hearing on **HB 2074** would be continued on February 4.

Representative Storm moved and Representative Toelkes seconded introduction of a bill to require smoke alarms in each nursing home room. The motion carried.

Representative Henry moved and Representative Wells seconded introduction of a bill to require any person maintaining a family day care home who provides care at such place for two or more children not related to such person by blood, marriage or legal adoption shall register such home with the secretary of health and environment. The motion carried.

The meeting adjourned at 3:15 p.m. The next meeting will be February 4.

HUMAN AND HEALTH SERVICES

DATE 2-3-99

NAME	REPRESENTING
Loanne A. Phillips	KOHE
GIANFRANCO TEZZINO	KDHE
Pat Cook, M.D.	
Kurt E. Cook	
DEN CARREL	
Shellie Brandon	
Jennifer Richer	
Jiffany Keenan	
Pat. Hays	KDHE
Paul Hays	CHPPKM
ANDREW M. LEES	
Michael Fowler	AIDS Council of Gr. K.C.
LINDA McGill	MGA
Kurt Galley	MGA
Carolyn Muddendorf	KSDA
Meg Hill	Federico Consulting
KEVIN ROBERTSON	Ks. Dental Assoc.
Stacy Seldan	Hill & Hill Child.
Deborah Arny	Colby Community College
Michelle Arny	Colby Community College
Sheila Adams	Comm College Assoc / KACCT
Michelle Peterson	Peterson Public Affairs Group
Kelly Anderson	Topeka AIDS Project
Jeffrey Turner	Topeka AIDS Proj
Angela Martin	Topeka AIDS Project
Tom Bell	Ks. Hosp. Assn.
John Peterson	Ks. Dental Assn
<b>ERIC Sexton</b>	<b>WSU</b>
Danielle Hae	Governor's Office
Sherry Karen Baer, RSCSW	Topeka AIDS Project

# Report of the Dental Hygienist Training Committee

Prepared for the Kansas Legislature  
January 11, 1999

## Charge to the Committee

From House Bill 2724, Section 3:

"The state board of education, the state board of regents and the Kansas dental board shall report to the legislature on or before January 11, 1999, on plans for increasing the number of persons in this state being trained as dental hygienists."

Based on the history of the legislation, the committee worked not only to address its direct charge but also to address the underlying issue, endorsed by both dentists and dental hygienists, of providing access to quality dental care to all Kansans. According to the Kansas Dental Board, 36 Kansas counties are without the services of a practicing hygienist while only 13 counties are without the services of a practicing dentist. The shortage of dental hygienists affects the ability of dentists, particularly in rural Kansas, to deliver care.

It should be noted that the federal government and the Kansas Department of Health and Environment (KDHE) have indicated that only fourteen Kansas counties and the indigent population in Topeka are dentally underserved (*Kansas Statistical Abstract*, 1997). The population of these areas represents 2.7 percent of the population of Kansas. Through its action on HB2724, the legislature has demonstrated its belief that the federal guidelines for designation of underserved areas (1:5000 ratio of dentists to population, *Kansas Statistical Abstract*, 1997) do not coincide with any common sense definition of adequate service, and the committee concurs.

Before making recommendations, this report will first differentiate among dentists, dental hygienists, and dental assistants in terms of training, licensure/certification, and practice. Then it will provide a context for what is happening nationally and in Kansas with regard to providers of dental care. Next, issues will be clarified and alternatives will be identified. Finally, the committee will make its recommendations to the legislature regarding how the committee feels the state can best address the issue of providing access to quality dental care to all Kansans and increasing the number of persons in Kansas being trained as dental hygienists.

## Training, Licensure/Certification, and Practice

Traditional dental school programs require four years of college prior to four years of dental school training. National and clinical board examinations are required

HHS  
2-3-99  
Atch #1

prior to licensure. Licensure by the state is for one or two years, and continuing education courses are mandatory for renewal in most states.

Traditional dental hygiene programs are two years in length and award a certificate or associate degree. Baccalaureate degrees are also available in the university setting. Accredited programs require approximately 1,950 clock hours and more than 700 clinical hours of instruction. National and clinical board examinations are required prior to licensure. Licensure by the state is for one or two years, and continuing education courses are mandatory for renewal in most states. Thirty-three states, including Kansas, plus the District of Columbia, allow dental hygienists to practice under general supervision (physical presence of dentist not required). In general, hygienists are trained to perform services on patients. Under general supervision, Kansas dental hygienists can perform oral health assessments, scale, root plane, apply fluoride and sealants, place and remove perio dressings, remove sutures, place and remove temporary restorations, and other activities, including all activities performed by dental assistants.

Certification for dental assistants is available but not required in any state. Most dental assistants are trained in dental offices by dentists. Formal dental assisting programs are nine months in length, and graduates receive a diploma or an associate degree. To become certified, a national board examination is required. To maintain certification, continuing education courses are mandatory. In contrast to a dental hygienist, who works directly on patients, a dental assistant is trained primarily to work chairside with a dentist. Among other responsibilities, assistants also mix dental materials, perform lab procedures, take x-rays, create models, take dental impressions, polish teeth, and bond and remove orthodontic appliances.

### National Context

#### National Trends in Training Dentists

In examining the supply of dental hygienists, it is also necessary to examine the supply of dentists, since dental hygienists are almost exclusively employed by dentists. There have been two major periods of change in the number of dentists graduating nationally. From 1960 to 1978, the number of first-year enrollments grew from approximately 3,500 to over 6,000 (American Association of Dental Schools, 1997). During this period, the baby boomers came of college age, and there was broad national support (scholarships and federal capitation grants) for expanding the number of health care providers.

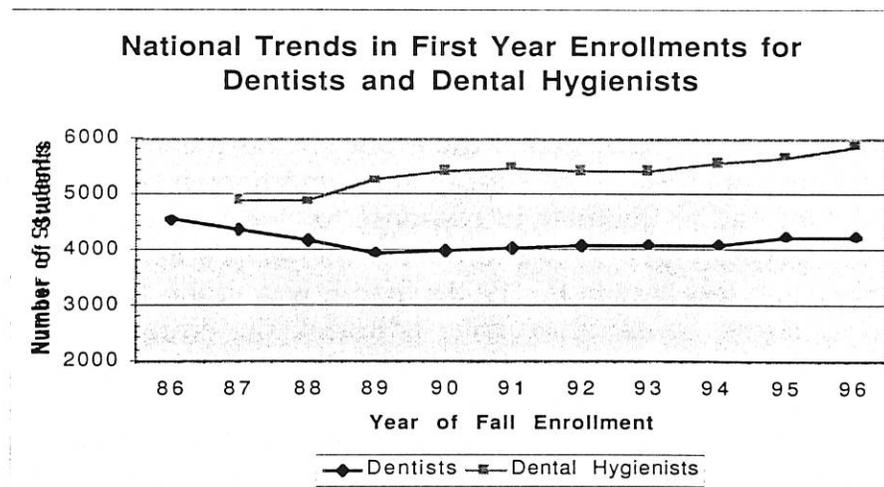
This surge in enrollment was followed by a period of rapid decline. The American Association of Dental Schools (AADS) noted several reasons for the dropping enrollments (1997). Concerns began to be raised about a possible oversupply of dentists. Stagflation in early 1980 was followed by the recession of 1981. Both demand for dental care and dental incomes are directly linked to the health of the U.S. economy. Federal capitation grants to schools of dentistry were discontinued in

1981. From 1986 through 1993, six dental schools closed and others reduced their enrollments. First-year enrollment in U.S. dental schools dropped from a peak of 6,300 to 3,979 in 1990 (see Figure 1).

The number of applicants to dental schools has increased during the 1990's. This increase is due not to an increase in college age youth, but rather to an escalation in the number of degrees in the biological sciences, resulting in an expanded applicant pool for the health professions (AADS, 1997). In addition, the strong economy is cited as a factor that has led to an increase in dental school applicants. Directly related to the strength of the economy, the average net income of full-time independent dentists in the U.S. increased from \$74,040 in 1986 to \$134,590 in 1995 (July, 1998, *Journal of the American Dental Association*). Increased costs and lowered revenues due to managed care have slowed the growth in dentists' net incomes since 1995.

Although the economy of the country has been strong in the late 1990's and applications are at increased levels, enrollment at U.S. dental schools has remained flat and dental school deans have reported that they do not plan to increase enrollment. Currently, first-year enrollment for all U.S. dental schools remains around 4,200. The ratio of the number of dentists per 100,000 population has been decreasing since the mid-1980's. It is estimated that by 2020 there will be 54.7 dentists per 100,000 people (AADS, 1997), the lowest ratio since World War I (Dugoni, 1995). However, due to advances in the use of technology and allied dental personnel, it must be noted that quality dental care has never been more available than it is today.

Figure 1.



### Dental Hygiene Supply

Enrollments in dental hygiene programs fell to their lowest level in 1988/89. They have been steadily increasing since that time. At its lowest point, first-year enrollment in dental hygiene programs was 4,883 (see Figure 1). The most recent

data indicate a nation-wide first-year enrollment of 5,868 for the 1996-97 academic year (ADA, 1997). Numerous factors have contributed to increased dental hygiene first-year enrollments. Forty-seven new dental hygiene programs have opened their doors since 1990 (Commission on Dental Accreditation, 1998) and seven additional proposed programs will be considered in January, 1999 (Communication from the Commission on Dental Accreditation, 1998). Dental hygiene programs also report the gap between first-year capacity versus first-year enrollment has narrowed. The increased enrollment is also likely due to increased salaries. Based on a 1996 ADA national survey of all dentists, dental hygienists' salaries increased 13 percent between 1990 and 1994, and the average salary in 1995 was \$34,955 (\$759/week times 46 weeks).

The number of dentists graduating is now nearly 33 percent lower than it was in the early 1980's. While the number of dentists graduating has stabilized at approximately 3,800 per year, the number of dental hygienists graduating has been climbing each year since 1988. Due to the national trend toward opening more schools and the narrowing of the gap between capacity and enrollments in existing programs, first-year enrollment in 1996 was 5,868. At least thirty new programs have opened since 1996, further contributing to the national supply of dental hygienists.

While these data suggest that the supply and demand of dental hygienists to dentists should be more equitable now, other factors must be taken into consideration. Since the early 1980's more dentists have added dental hygienists to their practices. The most recent ADA Survey of Dental Practice (1997) indicated that 63 percent of dentists currently employ at least one full-time or one part-time dental hygienist. Of the dental hygienists employed by these dentists, 36% were employed full-time (32 or more hours per week, an average of 34.6 hours per week) and 64% were employed part-time (less than 32 hours per week, an average of 16.3 hours per week).

Another factor that has changed is that the economy has played a role in the strong demand for dental hygienists. "The supply and employment of auxiliary dental personnel will continue to fluctuate in response to changes in market conditions for dental services" (ADA, 1983). This quote from the ADA's *Report on the Future of Dentistry* has been no less true in the 1990's than it was in the 1980's. In a 1995 *Journal of the American Dental Association* editorial, the editor wrote, "The number of dentists graduating from dental schools does not require any adjustment. In the future, if shortages in dental services develop they can be remedied through the judicious use of allied personnel." Thus, the demand for dental hygienists is likely to be even more sensitive to the upswings and downturns of the U.S. economy. It should be noted that this "judicious use of allied personnel" cannot occur in Kansas unless the necessary legislation and modifications to the Kansas Dental Practice Act take place.

On the other hand, the 1995 ADA survey (Lazar, 1997) indicated that dental hygienists had an average of 6.2 years in their current practices and an average of 7.1

years of previous experience, resulting in an average of 13.3 years of dental hygiene practice. With the yearly increase in the number of dental hygiene program graduates, this average will likely increase. Also, dentists who graduated during the peak enrollment years of the early 1980's are now in their most productive practice years, assuming a practice span of 35 to 40 years. Thus, because dental hygienists work for dentists, the ratio of hygienists to dentists will shift upward as the effects of the trend toward smaller dental school graduating classes come into play.

### Kansas Context

Table 1 illustrates the number of Kansans per dentist and per dental hygienist. Displaying the information by region highlights the maldistribution of both dentists and dental hygienists.

Table 1. Ratio of Population to Dentists and Hygienists in Kansas (1998)

Region	Population	No. of Dentists	Population per Dentist	No. of Dental Hyg.	Population per D H
Northwest	133,312	59	2,259.5	31	4,300.4
Northeast	392,721	243	1,616.1	162	2,424.2
Kansas City	781,212	502	1,556.2	376	2,077.7
Southwest	212,332	77	2,757.6	32	6,635.4
Wichita	672,136	305	2,203.7	314	2,140.6
Southeast	255,127	87	2,932.5	43	5,933.2
Total	2,446,840	1273	1,922.1	958	2,554.1

(Data from Kansas Dental Board, 1998 and *Kansas Statistical Abstract*, 1997)

(Note: Data include both full- and part-time dentists and dental hygienists.)

### Training Dentists for Kansas

There are 55 dental schools in the United States. The nearest to Kansas are in each of the surrounding states. The University of Colorado Medical Center School of Dentistry is located in Denver. The University of Oklahoma Health Science Center College of Dentistry is located in Oklahoma City. Nebraska offers two programs, the University of Nebraska College of Dentistry in Lincoln and the Creighton University School of Dentistry in Omaha. Finally, perhaps the program most familiar to Kansas dentists is the one at the University of Missouri-Kansas City (UMKC). It is the only dental school in Missouri, after two schools in St. Louis (at Washington University and St. Louis University) closed several years ago. It is estimated that of the graduates of the UMKC program each year, after eliminating those graduates in specialties and those committed to other geographic locations, there are about 45 graduate dentists who go on to serve the two state area as general practitioners (Source: UMKC School of Dentistry, Alumni Records, 1998).

Income information is not available from the ADA for Kansas dentists, but the ADA (July, 1998, *Journal of the American Dental Association*) does give regional

figures. Full-time independent dentists in the West North Central Region (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota) increased from \$65,390 in 1986 to \$121,000 in 1995, an increase of 85%. Increased costs and lowered revenues due to managed care have slowed the growth in dentists' net incomes since 1995.

### Training Kansas Dental Hygienists

The following table summarizes the number of programs and first year capacities for Kansas and its four neighboring states. (Data from the American Dental Association, 1996/97 *Survey of Allied Dental Education*).

**Table 2.** Comparison of Numbers of Programs and First-year Capacities

State	Population	No. of DH BS Programs	No. of DH AS Programs	1st year capacity
Kansas*	2,446,840	0	2	56
Colorado	3,892,644	1	3	74
Missouri	5,402,058	1	2	82
Nebraska	1,656,570	1	1	35
Oklahoma	3,317,091	1	2	50

\* Data do not include the new program at Colby Community College (Data from the American Dental Association, 1996/97 *Survey of Allied Dental Education*)

Kansas' capacity consists of 30 first-year openings at Wichita State University and 26 openings at Johnson County Community College. Not included in the Kansas total is the new program which opened in the fall of 1998 at Colby Community College (CCC), utilizing a satellite feed from Northcentral Technical College in Wisconsin. Due to admissions requirements and late approval for the satellite feed from the Kansas Board of Regents, only six students were admitted this fall. Of those admitted, only three actually matriculated. CCC hopes to admit twelve in Fall, 1999, and to eventually increase the number admitted each year to eighteen. In recent years, an average of six students per year graduating from UMKC's baccalaureate program come back to Kansas to practice. Kansas is the only state listed without a baccalaureate program in dental hygiene. The most significant impact of this fact is that it limits the number of individuals locally available to teach in Kansas associate degree dental hygiene programs. This is a problem experienced by Colby Community College in starting its program. The dental hygiene program at WSU is currently studying the feasibility of implementing a four-year program.

Figures for annual earnings for dental hygienists are not available from the ADA. However, if we use the Bureau of Labor Statistics figure of \$20.63/hour for Kansas hygienists, and use the same method as the ADA to calculate yearly earnings, we arrive at a 1996 average annual earnings for Kansas dental hygienists of \$32,827 (\$713.63/week times 46 weeks).

## Identifying Issues

As should be expected, dentists and dental hygienists do not perceive the issues in the supply of dental hygienists in Kansas in the same way. Dentists are more likely to see it as an issue of cost to them. The demand is high and the supply is too low, creating an artificially high wage for dental hygienists. Dentists would like to see the supply of dental hygienists increase. Dental hygienists have objected to reports that their goal was to make as much money as dentists. However, while hygienists are not plotting to get that huge salary increase, neither do they want to give up their current average wage due to oversupply. The members of the committee began addressing this perception problem by asking, should we be looking at the number of dental hygienists needed to serve dentists in Kansas, or the number of dental hygienists needed to serve those in Kansas needing the services provided by dental hygienists? This was resolved in short order. All committee members agreed that the issue was how to provide access to quality dental care to all Kansans. Still, given that dental hygienists can only practice through a dental practice, we also agreed that some thought must be given to the ratio of dental hygienists to dentists.

## Arriving at a number

The next issue was how to arrive at a target number for dental hygienists that need to be trained. Members of the committee agreed that each of the following attempts to arrive at a number required a lot of assumptions, and some of those are based upon questionable projections.

The first figure the committee discussed was from the *Kansas Occupational Outlook* (U.S. Bureau of Labor Statistics, 1997). The BLS projects that in each year between 1995 and 2005, there will be openings for 60 hygienists in Kansas. This figure is said to include provisions for both attrition and growth. Unfortunately, the BLS figures for 1984 to 1995 overestimated the number of dentists by 35,000 (22.2%) nationally, and underestimated the number of dental hygienists by 23,000 (28.2%) (U.S. Bureau of Labor Statistics, 1997). Still, one member suggested, if one multiplies the seven years left between now and 2005 times 60 per year, the result equals 420 hygienists. If one assumes that half this number will cover attrition and further assumes that the state's population will remain static, this would suggest that we need 210 new hygienists.

On our second attempt at coming up with a number, we noted that although only 63.4 percent of all dentists hire at least one dental hygienist, the national ratio of dental hygienists (full- and part-time) to dentists in all practices is one-to-one (ADA, 1996 *Survey of Dental Practice*). In 1998, there are 1273 dentists in Kansas and 958 full- and part-time hygienists. Thus, by this method, we would say that there is a shortage of 315 hygienists (1273 minus 958).

On the committee's third attempt, we decided to approach it from a more practical stance. We asked, how many patients can a hygienist see in a day? The hygienists on

the committee answered that eight was the right number, which coincided with the 1996 ADA *Survey of Dental Practice* results that said on average a hygienist, in the employ of an independent dentist, sees 42.6 patients per week. This amounts to 2,215 patients per year. Thus, 1,104 hygienists, or an additional 147 hygienists (over the current 958), could provide for only one visit for each Kansan once per year (assuming a state population of 2,446,840).

Finally, the committee examined a series of ratios, including 1:5000, 1:4000, 1:3000, 1:2500, 1:2000, and 1:1000 (see Attachment 1). The 1:2000 ratio was the highest ratio in which all regions identified by the committee showed a need for dental hygienists. This number coincides with the ADA's estimate of the number of active patients required to provide a viable practice. We then looked at the number of dental hygienists in the state by region, figured the number of additional hygienists needed to lower the ratio of the region to 1:2000, and added regional needs to determine the number of hygienists needed statewide. Table 3 illustrates with numbers.

**Table 3. Number of Dental Hygienists Needed to Reach 1:2000, by Region**

Region	Population	No. of Dental Hyg.	Ratio (/ 2 0 0 0)	Number DH Needed
Northwest	133,312	31	0.47	36
Northeast	392,721	162	0.83	34
Kansas City	781,212	376	0.96	15
Southwest	212,332	32	0.30	74
Wichita	672,136	314	0.93	22
Southeast	255,127	43	0.34	85
<b>Total</b>	<b>2,446,840</b>	<b>958</b>	<b>0.78</b>	<b>265</b>

It should be noted that though 265 may seem a high number, it is partially the result of a statistical effect in which the number of hygienists needed increases geometrically as the ratio grows smaller. This is shown in Table 4.

**Table 4. Number of Dental Hygienists Needed to Meet Specific Population Ratios in Kansas**

Ratio	Number of hygienists needed to meet ratio	Increment
1:5000	18	- -
1:4000	44	26
1:3000	94	50
1:2500	134	40
1:2000	265	131
1:1000	1488	1223

(Assumes Kansas population of 2,446,840)

As one can see from the table, it would only take 50 hygienists to lower the ratio from 1:4000 to 1:3000, but it takes 171 to lower it from 1:3000 to 1:2000, and 1223 to lower it from 1:2000 to 1:1000. Thus, if the committee had chosen 1:2500, the number of dental hygienists needed in the state would have been 134, or 131 less than 1:2000. Can we quantify the difference in service between 1:2000 and 1:2500? After discussion, committee members agreed to use the 265 figure as a working number. Consistent with the differences in perception, the Kansas Dental Hygienists' Association members have expressed concerns that the number is too high and Kansas Dental Association members have expressed concerns that it is too low. The committee used the 265 figure only as a place to begin discussion.

### Maldistribution

A review of Table 1 and Table 3 clearly shows that rural areas are less well-served than urban areas. This maldistribution of hygienists is worst in the Southwest Region, followed closely by the Southeast and the Northwest. To compound the problem, these three regions are also the most underserved in the number of dentists.

### Summary

The committee established the issues to be both a shortage and a maldistribution of hygienists. It recognized that the same issues exist with respect to dentistry, but alas, the state has little or no control over that aspect of the problem. One solution is, as the original charge to the committee indicates, to train more hygienists. We will also look at other ways to increase the number of dental hygienists in Kansas to help alleviate the shortage. However, without at least attempting to address the maldistribution issue, the goal of providing access to quality dental care to all Kansans is still remote at best.

### Addressing the Issues

#### Training More Hygienists

The committee identified three avenues by which to train more Kansans for dental hygiene:

- Increase the number of graduates from schools we already have.
- Work cooperatively with other states (notably Missouri and Nebraska) to reserve positions in programs close to Kansas borders.
- Create one or more additional dental hygiene programs around the state.

Increasing the output of current programs. Currently, Wichita State University admits 30 new students each year and graduates an average of 25, all of whom pass their boards and are eligible to practice within six months of graduation. Johnson County Community College admits 26 and graduates an average of 22, who likewise become eligible to practice. Colby Community College has just initiated its program.

CCC plans to admit 12 in the Fall of 1999 and to admit 18 every fall thereafter. We would expect that an average of 14 would become eligible to practice. Thus Kansas, with the maturity of the new program at CCC and taking into consideration UMKC graduates who return to Kansas, is projected to produce at least the 60 new hygienists needed per year as identified in the *Kansas Occupational Outlook, 1997* (BLS).

Johnson County Community College admits 26 first-year students because that is the maximum number of second-year students its clinical facilities can accommodate, according to accreditation guidelines. However, four students, on average, leave the program before the beginning of the second year. Based on this fact, JCCC is planning to increase its intake to 30, a 15 percent increase. Wichita State University is investigating its capacity to expand as well. CCC will be hard-pressed to expand beyond the 18 already projected. Existing programs should continue to investigate fiscally responsible ways to serve their communities through flexible scheduling and/or creative programming.

Like other health care programs, dental hygiene is expensive to maintain. For example, to expand at JCCC would require remodeling, including the loss of badly needed science lab space, and the hiring of additional faculty. Further, the cost of the program is currently greater than \$300 per credit hour per student. The revenue for the program is around \$100 per credit hour per student (tuition plus state reimbursement). Thus, assuming that costs did not rise, every additional credit hour in the expanded program would cost the college another \$200. As Table 3 indicates, by far the most significant need for additional hygienists is in western Kansas. Past experience has shown that students from western Kansas who have received dental hygiene training at JCCC have not gone back to western Kansas; rather, they have tended to stay in the metropolitan area. Thus, with the UMKC program having just increased its program by six students, it does not make economic sense for the JCCC program to increase its first year enrollments beyond thirty.

Access to nearby schools in other states. An agreement already exists allowing up to 80 Kansas students to attend the UMKC Dental School as part of the Midwest Student Exchange Program (MSEP). These students pay one-and-one-half times the tuition paid by in-state Missouri students. Currently, 53 Kansans attend the UMKC Dental program and 27 Kansans are enrolled in the four-year UMKC Dental Hygiene program as part of this exchange. The most likely candidates for additional agreements are Missouri Southern State College (MSSC) at Joplin and Central Community College at Hastings, Nebraska. The program at Tulsa Community College is another possibility. The best opportunities are with MSSC, which is in the process of expanding its program and could provide training for southeast Kansas residents, and with Central Community College, which could provide opportunities for North Central Kansas residents. A few Kansas students have attended the MSSC program and returned to practice in southeast Kansas. Central CC is a smaller program, so the number of positions that could be reserved would be small. Unfortunately, informal inquiries to both these schools have been discouraging.

Each would welcome Kansas applicants, but neither is willing to guarantee positions. Neither program is currently a part of the Midwest Student Exchange Program.

If it is not possible to procure positions in these programs through the MSEP, some attempt should be made to procure seats through cooperative programs. In this situation a tuition program would be established so that Kansas residents could be reimbursed for the difference between in-state and out-of-state tuition. This would allow Kansans to attend at tuition rates comparable to in-state rates at Kansas schools. Otherwise, there would be little incentive for a Kansan to invest in the out-of-state program.

New schools. The establishment of new schools would have the most dramatic effect on the number of hygienists in Kansas. However, it raises a number of questions, the most significant being, where will the money come from to start and then to maintain a new program? Why would a school start a program that is going to cost it significantly more than it receives in reimbursement? The answer at Colby Community College is that the community need (encompassing western and northwestern Kansas) overshadowed the expense. Other community colleges have been reluctant to step forward, presumably due to the high cost of both starting and maintaining a program.

One possible solution is to establish the new program at a technical college. Because of the difference in how programs are funded, the negative impact on revenues would be limited. The legislature would have to appropriate the "up-front" money needed to establish the program, then current state funding would maintain it. The committee recommends that if new programs are established, that only one be established. A possible candidate for a new program is Flint Hills Technical College at Emporia. This is one of three sites in Kansas that already has a dental assisting program. Establishment at one of these sites would provide efficiencies through better utilization of facilities and faculty and integration of the two curricula. Additionally, Emporia is roughly halfway between established programs in Overland Park and Wichita. It would serve to address the needs of both the northeast and the southeast regions. Perhaps at some point in the future, another school should be established in the southwest. However, for the present, Colby CC should be given the opportunity to show that its program can serve the western part of the state. Whether or not a new school is established, money should be appropriated to provide CCC with the resources it needs to ensure its dental hygiene program is a success.

Another suggestion that would make it more attractive for community colleges to start a new dental hygiene program would be a change in funding. Technical schools and colleges are currently funded by the "85/15" formula, meaning that student tuition covers 15% of the cost of the program and the state reimburses the institution 85% of the cost of the program. If all dental hygiene programs were

funded by the 85/15 formula, schools would be better reimbursed for the cost of the program and would be more likely to invest in starting or expanding a program.

There are few shortages in the populated areas of the state of Kansas. If there is no change in the Kansas Dental Practice Act, there is little use in establishing a new school, as it will likely result in oversupply in urban areas and will not alleviate the problem of underservice in the rural areas.

To encourage new graduates to practice in underserved areas, the Kansas State Legislature could establish a tuition reimbursement program. It would be based on the same principle as the Kansas Medical Student Loan Program, that monetary incentives will induce graduates to practice in underserved areas. Under this program, graduates would be reimbursed the cost of their tuition, course fees and supplies, and examination fees (first attempt only) for serving a minimum of two-years in an identified dentally underserved area of Kansas.

#### Lowering Attrition and Making Reentry Easier

Attrition from dental hygiene practice can be attributed to personal reasons, reasons related to the particular practices with which individual dental hygienists are associated and the difficulty in reentering the profession after moving. It is a fact that more than 95 percent of hygienists are female. Since there is little opportunity for advancement, one attraction of dental hygiene practice for these women is that 'stopping out' (temporary unemployment) for family reasons incurs no penalty. Another issue is that in households with two wage earners, the dental hygiene practitioner tends to be the second income, so that if the primary wage earner in the household is required to relocate, the dental hygiene practitioner will likely follow, which leads to problems of reentry.

A review of the literature indicates that limitations of dental hygiene practice have been identified as factors influencing attrition from and reentry into the profession of dental hygiene. Changes in work force issues suggested to bring hygienists back to employment include issues related to salary and benefits, greater utilization of hygienists' skills, input into office procedures for infection control, office management and interpersonal relationships, restrictions of the law, and reciprocity of licensure. While the first four issues listed must be dealt with by individual dental practices, there are two potential areas for change of the dental practice act which could increase the number of hygienists returning to the workforce.

First, the Kansas Dental Board currently accepts only the Central Regional Dental Testing Service and Western Regional Examining Board clinical board examinations. It is recommended that the Kansas Dental Board accept clinical board examination results for graduates of accredited dental hygiene programs from all regional and individual states. This would increase the mobility of licensed hygienists in active practice and new graduates.

Second, for previously licensed hygienists who have not been in active practice or who have let their licenses lapse, the Kansas Dental Board requires the individual to repeat the clinical board examination. It is recommended that the Kansas Dental Practice Act be changed to allow the Kansas Dental Board to accept approved refresher courses in dental hygiene continuing education in lieu of repeating the clinical examination. These courses would be modeled after the refresher courses at Forsythe Dental Center in Massachusetts, which is recognized by several state dental boards. The course would include content in both classroom and clinical instruction and typically includes a minimum of two clinical days. The educational institution which sponsors the course verifies successful completion and an adequate level of competence to return to the workforce.

### Expanding the Scope of Dental Hygiene Practice

The dentally underserved areas of Kansas are underserved by dentists as well as by dental hygienists. The state has some control over the number of dental hygienists, but it is unlikely to be able to increase the number of dentists significantly. How, then, is the maldistribution of dental care practitioners to be addressed?

A place to start would be the 30 clinics for the medically underserved in Kansas. These clinics receive grant funding or cost-based reimbursement for services provided. The new health insurance programs (CHIP and Health Wave) enacted this past year by the legislature are designed to improve access to medical and dental care for low-income children. It is estimated that as many as 60,000 Kansas children could benefit from this program. As Dr. Michael J. Reed, Dean of the UMKC School of Dentistry, says in a letter inviting officials from Missouri and Kansas to a mini-policy conference on oral health scheduled for January 29, 1999:

[Providing] dental care presents a serious problem, however [sic]. The current Medicaid programs in both states [Kansas and Missouri] are, for various reasons, failing to attract enough dental providers to meet the current demand for services. In large portions of Missouri and Kansas, Medicaid recipients cannot find a dentist who will treat them. Adding 150,000 new patients [including 90,000 in Missouri] to these overburdened, underperforming systems is unlikely to make things better.

Because there are not enough dental providers to meet the current demand for services, this is a prime opportunity for hygienists to help meet the needs of this population in Kansas. This could happen if dental hygienists are allowed to work with dentally indigent patients under less restrictive supervision in clinics for the medically underserved, in nursing homes, and in hospitals.

The present law requires a dentist to examine the patient within a twelve month period prior to the dental hygienist seeing the patient. Under a new plan, a dentist might never see the patient directly. Rather, the dental hygienist would perform services already approved under general supervision. Then, the records would be

examined by a dentist, licensed in Kansas and acting in the capacity of a dental consultant. If necessary, the patient would be referred to a dentist for evaluation and necessary treatment. This is a clumsy way to meet the needs, but it does provide a way to stretch a very limited dental resource—the dentists. Perhaps more importantly, it puts Kansas well on the way to being able to implement tele-dentistry, in which the hygienist would create the records, but the dentist could look at both the information and the patient through technology.

### Recommendations

1. Change the way dental hygiene programs are funded, from reimbursement per credit hour to a formula through which the state pays 85% of the cost of the program and the student pays 15%.
2. Establish of a State Education Fund for tuition reimbursement for hygienists who agree to practice in areas identified by the Kansas Dental Board as underserved.
3. Change the Kansas Dental Practice Act to make it easier for dental hygiene practitioners to relocate and to reenter practice.
4. The Kansas Dental Board should accept the clinical board examination results for graduates of accredited dental hygiene education programs from all regional and individual states' examinations.
5. Change the Kansas Dental Practice Act to allow dental hygienists to work with dentally indigent patients under less restrictive supervision in clinics for the medically underserved, in nursing homes, and in hospitals.
6. Establish one new dental hygiene education program.
7. Increase access to out-of-state dental hygiene programs through student exchange, cooperative agreements, and tuition reimbursement programs.
8. Establish a representative committee to gather more specific information on the current dental care situation in Kansas through the implementation of surveys and research, and to monitor/evaluate the effects of the changes implemented in the Kansas Dental Practice Act.

## Attachments

Attachment 1 is a map of Kansas with regional boundaries agreed upon by the members of the committee. It shows current numbers of dentists and dental hygienists by county and by region. Attachment 2 is a chart showing the current ratios of population to dentists and hygienists for the six regions. It also shows the numbers of hygienists needed to reach particular ratios of population to hygienists. These figures were used in the committee's deliberations.

## Participants

HB 2724 specified who was to report this issue to the legislature. KSDE, together with the Board of Regents, formulated the original list. The following individuals were among those originally called by Don Richards to be on the committee:

Estel Landreth, 1998 President of the Kansas Dental Board, Wichita  
Margaret LoGiudice, Johnson County Community College Dental Hygiene Program, Director  
Denise Maseman, Wichita State University Dental Hygiene Program, Director  
Melanie Mitchell, Wichita Technical College Dental Assisting Program, Director  
Pam Overman, UMKC School of Dentistry, Division of Dental Hygiene, Director  
Don Richards, Kansas State Department of Education, Health Occupations Education Consultant  
Kathy Rupp, Kansas Board of Regents, Associate Director of Academic Affairs  
Becky Vollertsen, Colby Community College Dental Hygiene Program, Director

The following individuals also participated on the committee at the invitation of the members of the original committee:

Kelly Douglass, Kansas Dental Board, member  
John Federico, Kansas Dental Association, Lobbyist  
Teresa Higgins, Kansas Dental Hygienists' Association, President-elect  
Gracemary Melvin, Colby Community College, Dean of Instruction  
Kevin Robertson, Kansas Dental Association, Executive Director  
Anne Spiess, Kansas Dental Association, Lobbyist  
Ted White, Johnson County Community College, Associate Dean of Instruction  
Jim Yonally, Kansas Dental Hygienists' Association lobbyist

Recorders included:

Charlene Beaver, Johnson County Community College Administrative Assistant  
Ruth Dreher, Johnson County Community College Administrative Assistant  
Charlotte Zeller, Kansas State Department of Education, Technical Assistant

## Meeting Dates

The DHTC met five times:

- September 3 at Johnson County Community College in Overland Park
- October 1 at the Washburn University Memorial Union in Topeka
- October 29 at the Kansas Department of Education Annex in Topeka
- December 2 at the Washburn University Memorial Union
- January 7 at the Washburn University Memorial Union

This document represents a truly collaborative effort. Each of the members of the committee should be commended for approaching this task with an open mind and dedication to service. This report was adopted unanimously by the members present at the final meeting.

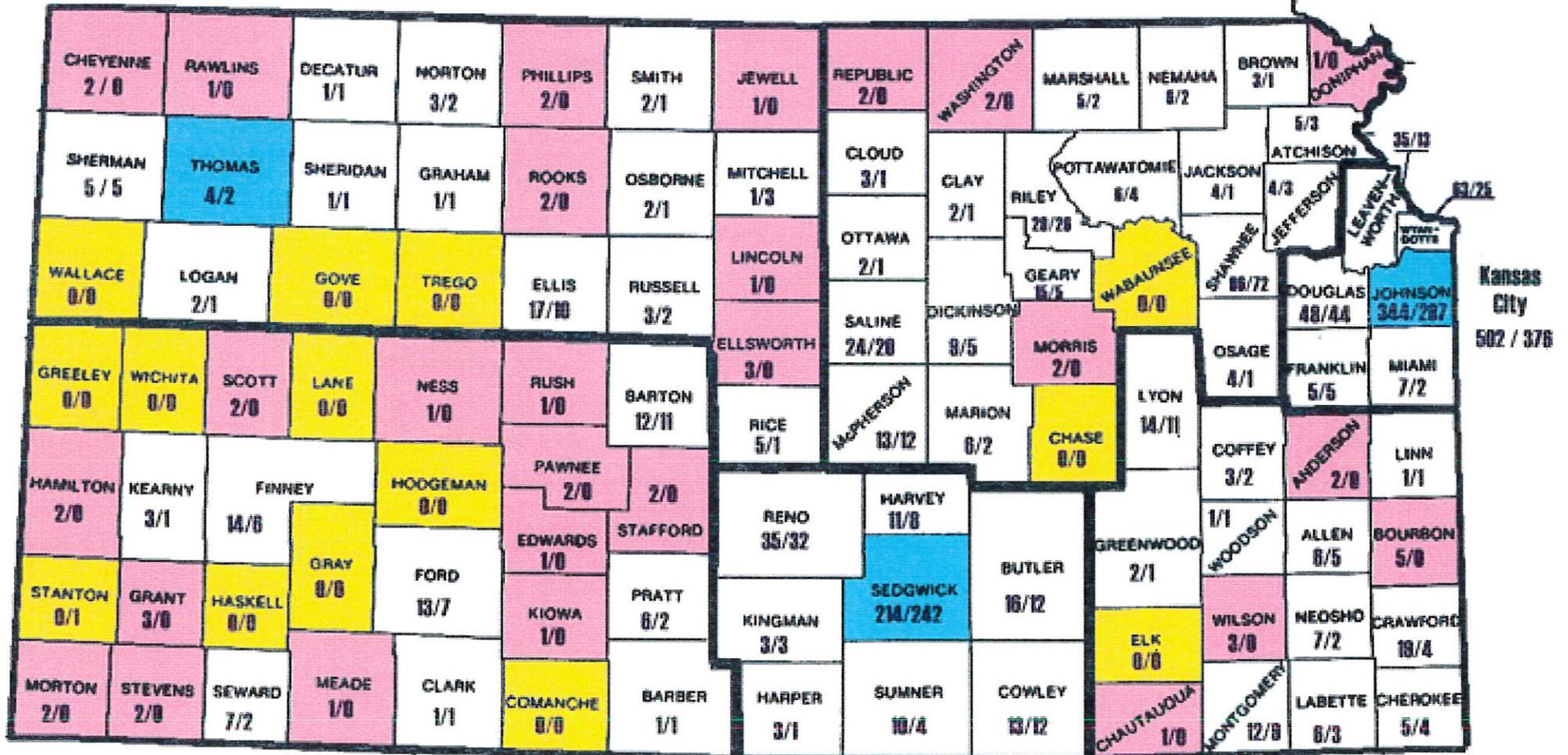
Presented on behalf of the Dental Hygienist Training Committee by:

Margaret LoGiudice, RDH, MS  
(913-469-2582)

Ted White, Ph.D.  
(913-469-2573)

NorthWest  
58 / 31

NorthEast  
243 / 162



SouthWest  
77 / 32

South  
305 / 314

SouthEast  
87 / 43

## Attachment 2

### Current Ratios of Population to Dentists and Dental Hygienists by Region

Region	Population	No. of Dentists	Population per Dentist	No. of Dental Hyg.	Population per D H
Northwest	133,312	59	2,259.5	31	4,300.4
Northeast	392,721	243	1,616.1	162	2,424.2
Kansas City	781,212	502	1,556.2	376	2,077.7
Southwest	212,332	77	2,757.6	32	6,635.4
Wichita	672,136	305	2,203.7	314	2,140.6
Southeast	255,127	87	2,932.5	43	5,933.2
<b>Total</b>	<b>2,446,840</b>	<b>1273</b>	<b>1,922.1</b>	<b>958</b>	<b>2,554.1</b>

### Current Ratios of Dentists to Population by Region

Region	Population	No. of Dentists	Ratio (per 5000)	Ratio (per 1000)
Northwest	133,312	59	0.44	2.21
Northeast	392,721	243	0.62	3.09
Kansas City	781,212	502	0.64	3.21
Southwest	212,332	77	0.36	1.81
Wichita	672,136	305	0.45	2.27
Southeast	255,127	87	0.34	1.71
<b>Total</b>	<b>2,446,840</b>	<b>1273</b>	<b>0.52</b>	<b>2.60</b>

### Projected Needs for Dental Hygienists by Region for Various Ratios

Region	Population	No. of Dental Hyg.	Ratio (/ 5000)	No. DH Needed	Ratio (/ 4000)	Number DH Needed	Ratio (/ 3000)	Number DH Needed
Northwest	133,312	31	1.16	0.00	0.93	2.33	0.70	13.44
Northeast	392,721	162	2.06	0.00	1.65	0.00	1.24	0.00
Kansas City	781,212	376	2.41	0.00	1.93	0.00	1.44	0.00
Southwest	212,332	32	0.75	10.47	0.60	21.08	0.45	38.78
Wichita	672,136	314	2.34	0.00	1.87	0.00	1.40	0.00
Southeast	255,127	43	0.84	8.03	0.67	20.78	0.51	42.04
<b>Total</b>	<b>2,446,840</b>	<b>958</b>	<b>1.96</b>	<b>18.49</b>	<b>1.57</b>	<b>44.19</b>	<b>1.17</b>	<b>94.26</b>

Region	Population	No. of Dental Hyg.	Ratio (/ 2500)	Number DH Needed	Ratio (/ 2000)	Number DH Needed	Ratio (/ 1000)	Number DH Needed
Northwest	133,312	31	0.58	22.32	0.47	35.66	0.23	102.31
Northeast	392,721	162	1.03	0.00	0.83	34.36	0.41	230.72
Kansas City	781,212	376	1.20	0.00	0.96	14.61	0.48	405.21
Southwest	212,332	32	0.75	52.93	0.30	74.17	0.15	180.33
Wichita	672,136	314	1.17	0.00	0.93	22.07	0.47	358.14
Southeast	255,127	43	0.42	59.05	0.34	84.56	0.17	212.13
<b>Total</b>	<b>2,446,840</b>	<b>958</b>	<b>0.98</b>	<b>134.31</b>	<b>0.78</b>	<b>265.42</b>	<b>0.39</b>	<b>1488.84</b>

# COLBY COMMUNITY COLLEGE

## DENTAL HYGIENE PROGRAM

HHS  
2-3-99  
Atch# 2

**DENTAL HYGIENE PROGRAM INQUIRIES  
AS OF FEBRUARY 1, 1999**

<u>CITY</u>	<u>NUMBER OF INQUIRIES</u>
Abilene	1
•Atwood	3
Arkansas City	1
•Bird City	1
•Brewster	1
Burns, WY	1
Cheney	1
Clay Center	1
•Clayton	1
•Colby	22
Coldwater	2
Commerce City, CO	1
>Culbertson, NE	2
>Danbury, NE	1
Deerfield	1
•Dighton	1
>Dodge City	2
•Dresden	1
>Garden City	8
•Goodland	2
•Gorham	1
Granite Bay, CA	1
>Great Bend	3
•Grinnell	1
>Hanston	1
>Hastings, NE	1
•Hays	21
•Hill City	1
>Holcomb	1
•Hoxie	1
Hutchinson	1
>Hugo CO	1
Independence	1
>Indianola, NE	2
Kansas City, MO	2
>Kearney, NE	1
>Kinsley	1
>Lakin	3
Landover, MD	1
Lawrence	1
Lenexa	2
Leonardville	1
•Leoti	1
Little River	1
•Ludell	1
Manhattan	8
McCook, NE	9

>Meade	1
Merriam	1
•Norcatur	2
•Norton	4
>North Platte, NE	1
•Oakley	4
•Oberlin	3
Olathe	1
Oskaloosa	2
•Phillipsburg	1
•Plainville	1
•Prairie View	1
>Russell	1
•Russell Springs	2
Salina	4
Sandy, UT	1
•Scott City	1
•Selden	2
•St. Francis	2
St. George	1
>Sublette	1
>Syracuse	2
Thoreau, NM	1
Topeka	3
Towanda	1
>Utica	1
•Victoria	1
•Wakeeney	1
Wakefield	1
West Jordan, UT	1
Wichita	3
Winfield	1
>Wray, CO	1

Total Inquiries	<u>177</u>
-----------------	------------

• Our Service Area	84
--------------------	----

> Western Kansas	<u>45</u>
------------------	-----------

Total Our Service Area and Western Kansas	<u>129</u>
---	------------

DENTAL HYGIENE APPLICANTS/STAGES OF APPLICATION

APPLIED/TAKEN AHAT (FILE READY FOR ADMISSIONS COMMITTEE)

Valerie June Bartels	Amy Jerome
Brandy Barth	Sheila Lang
Kari Sheree Burnett	Derek Mainus
Jessica Raylene Detwiler	Cary Semler
Mary Jo Drieling	Katrina Staab
	Tara Washburn

APPLIED/TAKEN AHAT (NEED ADDITIONAL COURSEWORK)

Janet Badsy	Kelly S. Miller
Julie Ann Habbart	Robin L. Tubbs
Hailey R. Knoll	

APPLIED (NOT TAKEN AHAT)

Emily Rachel Ambrose	Katie Kitten
Nikki June Askren	Micheline Kuper
Julie Kaye Calkins	Amanda Leitner
Tammi Jo Erickson	Angela Olsen
Angela M. Fisher	Lora Showalter
Tracey Fisher	Amy Simon
Mandy M. Gartrell	Kathryn M. Sis
Chasiti Ione Gutsch	Allison Lee Smith
Mary Hockersmith	Rebecca Uehlin
Teresa Holthaus	Lori Williams
	Rachel Sabatka Wilson

APPLIED/WILL RETAKE THE AHAT  
Christine Renee Tajchman

APPLIED/FAILED THE AHAT  
Amy Gurtner

Jennifer Williamson

Sherry Hawkins-Ketting

WITHDREW FROM CONSIDERATION

Jenna Britton

Sara McCurry

DENTAL HYGIENE PROGRAM INQUIRIES W/FILES STARTED

Janelle Adams

Jodilynn Diane Nowak

Chad G. Beiser

Kylee A. Pautler

Kimberly Marie Faver

Katie M. Ross

Brooke LaRae Holmes

Chanda M. Sabatka

Amy Horning

Dana Darice Staab

Cynthia Kassis

Erica Stephens

Brooke D. Lynd

Amy Denise Stoecklien

Jami R. Miller

Amy Schwarz

Leigh Ann Moore

Updated 2/01/99

**Dental Hygiene Income & Expenses**  
**Fiscal Year 1997-1998**  
**Expenses to Date**

**Travel**

4/97	Dr. Ary & Gracemary Melvin to Wausau	1,500.00
2/06/98	Comfort Inn - Colby	148.71
2/09/98	Diane Cralley	120.25
2/09/98	Becky Rajec	289.75
		\$2,058.71

**Curriculum Development**

6/04/98	Northcentral Technical College	11,880.00
6/30/98	Northcentral Technical College	1,353.69
6/30/98	Northcentral Technical College	5,378.16
		\$18,611.85

**Library Holdings**

6/29/98	Ebsco Subscription Service	270.46
6/29/98	Ebsco Subscription Service	422.69
6/29/98	Ebsco Subscription Service	1,104.50
6/29/98	Mosby Yearbook	1,249.21
		\$3,046.86

**Supplies**

6/29/98	Fisher Scientific	446.98
6/29/98	Patterson Dental	1,632.69
6/29/98	Patterson Dental	98.65
6/30/98	Patterson Dental	2,577.72
		\$4,756.04

**Equipment**

6/29/98	Carolina Biological Supply	266.90
6/29/98	Kilgore International	10,119.03
6/29/98	Denoyer Geppert	1,079.00
6/29/98	Western Auto	349.99
6/29/98	Patterson Dental	289.99
6/30/98	Patterson Dental	2,970.00
6/30/98	Micro Air, Inc.	2,875.00
6/30/98	Patterson Dental	346.00
		\$18,295.91

**GRAND TOTAL      \$46,769.37**

**Income**  
**1997-1998**

Senate Bill 33	Grant Proceeds	30,000.00
Kansas Dental Association	Donation	15,000.00

**Dental Hygiene Income & Expenses**  
**Fiscal Year 1998-1999**  
**Expenses to Date**

**Salary Costs**

8/98 to 6/99	Salary	35,000.00
8/98 to 6/99	Fringe	6,300.00
		\$41,300.00

**Travel**

7/24/98	Round Trip Travel	463.00
7/24/98	Ramada Inn	209.80
7/29/98	Sleep Inn	42.00
8/21/98	Becky Vollertsen	138.96
9/14/98	Becky Rajek	333.00
9/16/98	Becky Vollertsen	45.75
9/16/98	GE/Becky Vollertsen	66.60
9/29/98	Diane Cralley	492.13
10/07/98	Ramada Inn	169.12
10/16/98	Becky Rajek	205.10
11/16/98	Ramada Inn-Colby	157.41
11/18/98	Diane Cralley	87.60
1/05/99	Holiday Inn Express	121.70
1/07/99	Round Trip Travel (B. Vollertsen)	307.00
1/22/99	Outstanding Requests	168.32
		\$3007.49

**Contractual & Construction Supplies**

7/27/98	Colby Lumber	483.26
7/31/98	Jim's Electric	906.00
7/31/98	Jim's Electric	107.15
8/14/98	Western Auto	162.00
8/31/98	Colby Lumber	1,009.33
8/31/98	Golden Wholesale	27.91
8/31/98	Jim's Electric	4,654.86
8/31/98	Western Auto	63.40
8/31/98	B & L Furniture	2,767.00
8/31/98	Jerome Mazanec	720.00
9/02/98	Stephen's Construction	6,265.86
9/09/98	Brown's Plumbing	8,612.77
9/24/98	Golden Wholesale	155.94
9/24/98	RTSC Communications, Inc.	553.43
9/30/98	Golden Wholesale	155.94
10/01/98	Northcentral Technical College	6,862.23
		\$33,507.08

### Supplies

7/31/98	Patterson Dental	24.70
8/06/98	Micro Air, Inc.	575.00
8/14/98	Patterson Dental	16.95
8/19/98	Patterson Dental	87.00
8/19/98	Golden Wholesale	26.21
8/19/98	The Kangaroo Pouch	245.60
8/27/98	Patterson Dental	40.35
8/31/98	Patterson Dental	170.19
9/16/98	Patterson Dental	293.55
9/25/98	Airgas-Lyons Safety	78.63
9/25/98	Patterson Dental	130.95
10/08/98	Patterson Dental	163.85
10/08/98	Hu-Friedy	199.69
10/08/98	Anatomical Chart Co.	119.60
10/08/98	Campus Bookstore	61.70
10/08/98	American Dental Association	108.90
10/14/98	Patterson Dental	23.43
10/16/98	Lab Safety Supply, Inc.	33.33
10/22/98	Harcourt, Brace, Jovanovich	36.94
10/16/98	Henry Schein	152.98
12/04/98	Journal of Am. Dental Assoc.	45.95
12/07/98	Campus Bookstore	16.50
	Supplies on Order	9,487.71
		\$12,139.71

### Non-Instructional Supplies

7/31/98	Patterson Dental	24.70
8/19/98	Donelan Jewelry	28.80
8/19/98	Consolidated Plastics	179.03
8/25/98	Wal-Mart Stores, Inc.	41.46
9/16/98	Quill Corp.	46.38
9/25/98	Wal-Mart Stores, Inc.	60.73
9/25/98	Practicon Dental Supply	43.60
10/05/98	Federal Express Corporation	28.50
10/06/98	Becky Vollertsen	35.48
10/08/98	Wal-Mart Stores, Inc.	32.33
10/08/98	Consolidated Plastics Co.	101.06
10/08/98	Practicon Dental Supply	70.60
10/22/98	Campus Bookstore	17.02
10/28/98	Patterson Dental	157.20
10/29/98	Practicon Dental	30.65
10/29/98	Oral-B Laboratories	172.85
11/10/98	Boogaarts	23.27
11/17/98	Northwest Fire Extinguisher	109.50
11/23/98	Student Union	84.50
	Supplies On Order	1,450.23
		\$2,737.89



DONOR	ITEM AND DESCRIPTION	VALUE
	<u>1997-98 Donations Received</u>	
KDA	Cash	\$15,000
Dr. Glendening	Panorex x-ray machine	\$1,500
KDA	4 used dental chairs	<u>\$38,490</u>
	TOTAL 1997-98	\$54,990
	<u>1998-99 Donations Received</u>	
Dr. Albers	1985 Pelton-Crane Coachman chair, 2 dentist and 2 dentist assistant chairs	\$12,000
Dr. Barlow	X-ray mounts	\$142
Dr. Davis	2 Pelton-Crane LFI track lights	\$900
	2 Pelton-Crane LFI track lights	\$800
	1 Dental-eze chair on Ritter base	\$300
	1 SS white Marksman dental x-ray	\$600
	48 personal inhaler plus	\$130
"Doc" Holiday	T-14 Transistor/ultrasonic cleaner	\$900
Dr. Avondet	2 dental units attached to rolling carts and 1 chair	\$3,000
Dr. Hamel	dental equipment including	\$5,025
	1 Den-Tal-Ez chair with auto program, rawhide	
	1 Den-Tal-Ez chair with light post, blue	
	1 Chayes Virginia chair with over patient delivery system	
	2 ADEC wall mount delivery systems	
	2 assistant's carts with vacuum utilities	
	1 Dentsply cavitron	
	1 Handler model trimmer	
	1 Pelton-Crane LFI light	
	1 Chemclave (very old)	
Dr. Palmer	2 dental chairs	\$6,000
Dr. Davis	Porter nitrous oxide flow meter	\$800
Dr. VanBlaricum	lab coats	\$160
Dr. Hargreaves	1 Frazer-Harlake portable nitrous oxide delivery cart with flow meter	<u>\$5,000</u>
	TOTAL 1998-99	\$35,757
	<u>1998-1999 Donations In Progress</u>	
Johnson County Community College	1 General Electric Panelipse x-ray system—minus control 9 Pelton-Crane dental lights 1 Pelton-Crane autoclave 2 assistant's stools 1 automatic x-ray film processor (missing some parts)	
Dr. Lohse	1 Philips DC Pan III, sn K00921, panoramic x-ray unit	
Dr. Holm	1 dental unit and 2 assisting chairs	
Dr. Hertzog	Physicians Desk Reference, syringe, needles, lidocaine	

SUPERVISING DENTISTS  
SPRING SEMESTER 1999

Dentist	Address	Phone	Clinic Dates
Dr. Thomas Barlow	505 H N Franklin Colby, KS 67701	(O) 785-462-7538 (H) 785-462-6507	Jan. 21, 28 Feb. 11, 18, 24, 25 March 11 April 1, 29 May 13
Dr. Gary Fredrickson	106 S Rodehaven Oberlin, KS 67749	(O) 785-475-3813	Feb. 2 March 16 May 4
Dr. Mark Herzog	804 East 8 <sup>th</sup> Ellsworth, KS 67435	(O) 785-472-5420 (H)	Jan. 19 Feb. 9 April 13 May 11
Dr. Karl Neuenschwander	400 Main Street Hoxie, KS 67740	(O) 785-675-3292 (H) 785-675-3040	March 9
Dr. Tim Poling	Box 867 St. Francis, KS 67756	(O) 785-332-3103	Feb 4
Dr. Lamont Shirk	205 S Kansas Norton, KS 67654	(O) 785-877-2821 (H) 785-877-2736	Feb 16 March 2
Dr. John J. Streck	2404 Ash Hays, KS 67601	(H) 785-625-2134	March 18 April 15 May 6
Dr. Karen Thummel	480 West 4 <sup>th</sup> Colby, KS 67701	(O) 785-462-6800 (H) 785-462-9684	April 27
Dr. James VanBlaricum	602 E Second Pratt, KS 67124	(O) 316-672-5974 (H)	Jan. 26 Feb. 23 March 30 April 20 May 18 (if needed)

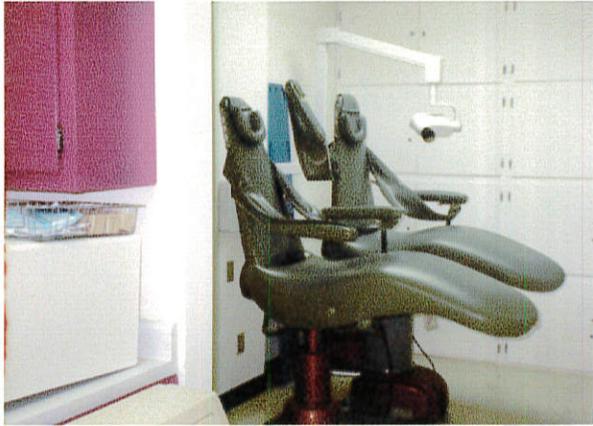
Updated 1/17/99

2-11

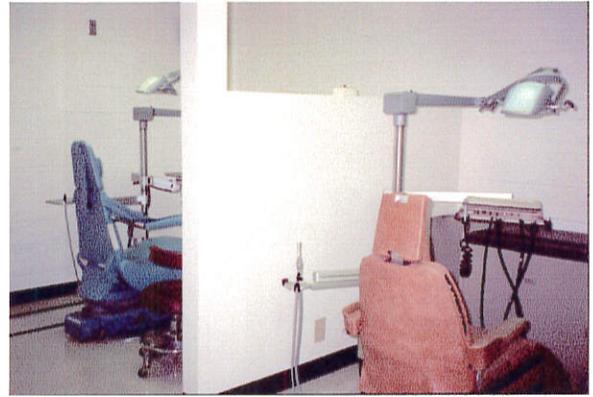
**RECOMMENDATIONS OF FOCUS SITE  
ACCREDITING TEAM**

locking file cabinet in clinic	<u>1/4/99</u>
move dayloader	<u>1/11/99</u>
move autoclave/ultrasonics	<u>1/12/99</u>
oxygen in clinic	<u>1/19/99</u>
radiographic equipment in #1	<u>Due to be installed Wednesday 2/3/99</u>
cover switch for x-ray	<u>12/1/98</u>
nitrous in clinic (locked up)	<u>1/19/99</u>
office space	<u>12/18/98</u>
move refrigerator to lab	<u>1/4/99</u>
emergency equipment in clinic	<u>1/12/99</u>
emergency equipment in lab	<u>12/18/98</u>
"holding" boxes in clinic (students books etc.)	<u>1/4/99</u>
long cone for x-ray unit	<u>Ordered</u>
locking file cabinet in office	<u>11/12/98</u>
biohazard stickers on outside of cabinets	<u>11/18/98</u>
adequate office help	<u>Pending Interviews</u>
storage for small clinic supplies cavitrons, prophylaxis jets, nitrous	<u>1/4/99</u>
x-ray badges for students	<u>Vendor Identified</u>
coat rack in clinic for patients	<u>1/12/99</u>
maintenance person for equipment	<u>12/15/98</u>
existing x-ray room:	
1. another lt. above #1 chair	<u>Design Change Implemented</u>
2. electricity to x-ray chair	<u>Done</u>
3. hang viewbox	<u>Done</u>

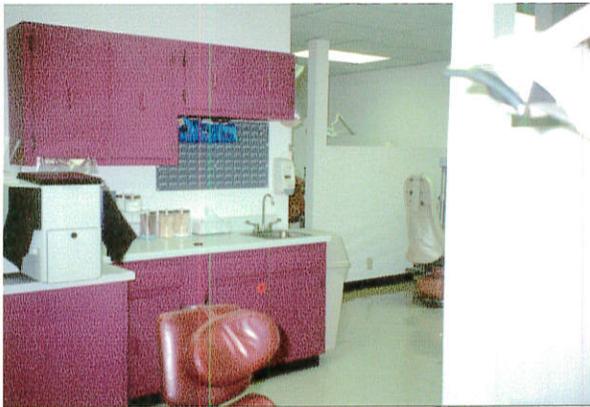
# Colby Community College Dental Hygiene Program



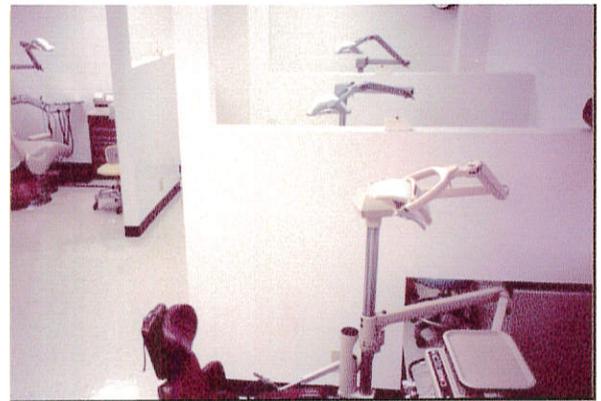
X-ray Area



Patient Chairs



Autoclave Area



View of Room



ITV Room



Lab

FACTS World AIDS Day 1998

# HIV Testing

Although it is estimated that between 650,000 and 900,000 Americans are currently infected with HIV, it has been estimated that only one fifth to one third of the U.S. adult population has been tested for the disease. Hundreds of thousands of American adults may be unaware of their HIV status and continue to engage in behavior that could jeopardize their health and that of many others.

**All sexually active adolescents and adults, particularly African Americans, Latinos and MSM; any injection drug users; and any pregnant women who fall into high-risk groups, should be tested for HIV.** For more information on HIV testing or HIV/AIDS, please contact the CDC National AIDS Hotline: 1-800-342-AIDS; Spanish: 1-800-344-SIDA; hearing impaired: 1-800-243-7889 (TTY).

## Testing Centers

HIV testing is available at most hospitals, family planning or sexually transmitted disease (STD) clinics, community health centers, drug treatment facilities, and doctors' offices. Most testing sites offer free or inexpensive tests. Contact your local health department for testing centers in your area.

## Privacy and Testing

It is important for anyone having an HIV test to understand the confidentiality policies of the testing center. Testing facilities offer two types of test procedures: confidential and anonymous.

- **Confidential HIV Testing** centers record the person's name along with the results of his/her test. The only people with access to your test results are medical personnel and, in some states, the state health department. However, your status may become known if you sign a release form to have your personal physician notified. Once this information becomes part of your medical record, even a student's medical record at a college or university, it may be seen by health care workers, insurers or employers. Your status also may become known if you make a claim for health insurance benefits or apply for life insurance or disability insurance.
- **Anonymous HIV Testing** means that no name is ever given to the testing center and only the person who is having the test is aware of the results. Anonymous testing is available in 40 states, the District of Columbia and Puerto Rico as of May 1997. State laws are, however, subject to change. You may check with the CDC National AIDS Hotline (1-800-342-AIDS) for the most up-to-date information.

## Available Tests (all may not be available at all sites)

### 1. Antibody Blood Tests

- Antibody blood tests are used to detect HIV antibodies in the bloodstream. The most common screening tests used today are EIA (enzyme immunoassay) and the ELISA (enzyme-linked immunosorbent assay). A second test, referred to as the Western Blot test, is run to confirm a positive result.
- When the EIA or ELISA is used in conjunction with the Western Blot confirmation test, the results are more than 99.9% accurate.
- Results from EIA/ELISA HIV tests are usually available several days to several weeks later.

### 2. Home Testing Kits

- Home Testing Kits, also referred to as Home Blood Collection Systems, contain HIV/AIDS literature and materials that permit you to take your own blood sample, which you then mail to a testing facility where your HIV status will be determined.
- Results are accessed by an anonymous identification number and are given over the telephone several days later.
- Home Testing Kits are sold in drugstores and health clinics throughout the country and are available by mail. Contact the CDC National Prevention Information Network for more information: 1-800-458-5231 (English/Spanish) or 1-800-243-7012 (TTY).

### 3. Oral Testing for HIV

- Oral HIV antibody EIA and oral HIV antibody Western Blot tests are alternatives to blood tests. Oral testing is done with samples of mucus from inside the cheeks and gums rather than with blood.
- Oral tests have been approved by the FDA and are as accurate as blood tests.
- Home test kits are not yet available.
- This test is done to detect the presence of HIV antibodies, not the virus itself. No cases of HIV transmission have been attributed to saliva.

## HIV Test Results

HIV tests can identify HIV antibodies in the blood as early as two weeks after infection, but the body may take up to six months to make a measurable amount of antibodies. The average time is 25 days.

- A **seropositive** result on an HIV test means that HIV antibodies are present in your bloodstream and you are HIV positive. The onset of AIDS may take up to 10 or more years. Drug treatments are available that can further delay the development of AIDS.
- A **seronegative** result usually indicates that you are not infected with HIV. However, you should be re-tested in six months if you have engaged in high-risk behavior during the past six months, because it can take this long for your immune system to produce enough antibodies.

Anyone who receives an HIV test should seek counseling before and after the test in order to understand the results, discuss prevention methods, and, if necessary, discuss drug treatment options.

National HIV Testing Day is June 27, 1999 — Get your community involved!

For more information, contact the National Association of People with AIDS at (202) 898-0414

HHS  
2-3-99  
Atch#3