



AEGD Residency Program Feasibility Study

December 29, 2005



Final Report to:

Oral Health Kansas, Inc.

Sedwick County



Table of Contents

SECTION 1: BACKGROUND & INTRODUCTION	1
PART ONE: INTRODUCTION	2
PART TWO: THE CONSULTING TEAM	3
PART THREE: METHODOLOGY FOR THE FEASIBILITY STUDY	3
SECTION 2: FEASIBILITY ANALYSIS & RECOMMENDATIONS	5
PART ONE: RESIDENTS	6
PART TWO: FACULTY & STAFF	9
PART THREE: ACADEMIC & HOSPITAL AFFILIATIONS, & ACCREDITATION OF PROGRAM	11
PART FOUR: FACILITIES	14
PART FIVE: FINANCES	19
SECTION 3: COMMUNITY ISSUES	25
PART ONE: THE UNDERSERVED	26
PART TWO: INCREASING THE SUPPLY OF DENTISTS	26
SECTION 4: APPENDICES	28
SECTION 5: EXHIBITS	50



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Section One

Background and Methodology

Part One: Introduction

On behalf of *Oral Health Kansas, Inc.*, Sedgwick County Government solicited proposals for a study to examine the feasibility of starting an Advanced Education in General Dentistry (AEGD) Residency program in Wichita, Kansas. The goals of the AEGD would include increasing access to oral health care and increasing the oral health care workforce for the state of Kansas.

Oral Health Kansas, Inc., is a coalition created in 2003 by interested parties from around the state who identified issues which warranted a more coordinated effort to considerably improve the oral health status of Kansans. Its priorities include the following:

- A. Increase the supply of dentists and dental hygienists, especially in low-income and rural areas.
- B. Increase the supply of oral health care services, especially in low-income and rural areas.
- C. Improve data monitoring and reporting. More information may be found at www.oralhealthkansas.org.

Sedgwick County Government is a member of *Oral Health Kansas, Inc.* and as such offered to issue the Request for Proposals and act as fiduciary agent regarding the feasibility study. Sedgwick County administers the Sedgwick County Health Department which serves the public health needs of the largest urban area of the state, including the City of Wichita and surrounding suburban and rural areas. The County has strong partnerships for public health and human services with other surrounding rural counties in the South-Central Kansas region as well as with the State of Kansas.

The feasibility of beginning an AEGD residency program in Kansas is based on a number of inter-related factors. Broadly stated, an AEGD residency program for the Wichita area has much to commend it:

- On average over the past five years, 48% of D.D.S. graduates go on to further training
- Of those graduates, approximately 29% apply for AEGD residency
- The number of slots for an AEGD residency are fewer than the number of interested applicants
- There are federal dollars available in the form of graduate medical education (GME) monies and possibly a HRSA grant for new programs
- The Wichita community is very interested in providing a home for the program
- The initiative is broadly supported by the dental community in Wichita
- Such a program has the potential to serve needs in the community and beyond and to increase the likelihood of dentists considering a permanent location for practice in the state of Kansas

- There is broad recognition at every level in the state of a pressing need to address oral health issues

The sections to follow will consider several crucial questions:

- How long will it take to open an AEGD residency?
- In what city or county should the program be located?
- How much start-up capital will be necessary and what are potential sources for funding?
- What university will provide the program with an academic home?
- What hospital should handle the GME funds, as required by federal statute?
- What site makes the most sense as a base for the program?
- What is the likely effect of the program on service to the underserved in Kansas?
- Will the program increase the supply of dentists in the state over time?

Part Two: The Consulting Team

The consulting team consisted of Marc T. Frankel, Ph.D and Judith Schechtman, M.S.W. of Triangle Associates, St. Louis and Richard Ranney, D.D.S. Full biographies of the three consultants may be found in Appendix A.

Part Three: Methodology for the Feasibility Study

The consulting team made two site visits to Wichita and a site visit to Albuquerque, New Mexico. In addition, there were numerous telephone conversations, two online surveys, and a thorough scan of information available through national associations and governmental resources, as described below.

1.1 Gathering Data from Existing Sources

Triangle Associates compiled data available from the American Dental Education Association (ADEA), the American Dental Association (ADA), the Bureau of Health Professions, and other sources to:

- Study trends in numbers of graduating undergraduates in dental education nationally.
- Study numbers of applicants to present AEGD programs nationally.
- Look at students from KS attending dental schools in other states, especially those contiguous to or near KS to determine where they go after finishing undergraduate programs.
- Explore emerging models of dental education i.e. Arizona School of Dental Health and other residency programs affiliated with schools of health

professions, i.e. the University of New Mexico, to investigate cost, likelihood of students to remain in the state, student attitudes toward service of underserved populations, and possible motivators to remaining within the state after completion.

1.2 Acquiring New Data

Triangle Associates also conducted:

- An online survey of a sample of soon-to-graduate students at three regional dental schools known to admit a large number of Kansans (the University of Missouri – Kansas City, Creighton University, and the University of Nebraska) ; This survey measured interest and likelihood to practice in Kansas, as well as residency program motivators; (see Appendix B for the survey form and data).
- An online survey of the South-Central Kansas dental practice community measuring attitudes toward the establishment of an AEGD program in the area (see Appendix C for the survey form and data).
- Telephone interviews with a sample of dental deans and AEGD program directors to discuss cost, faculty, resources, and location.
- Site visits and interviews with administrators at five safety-net clinics operating in and around Wichita.
- Site visits and interviews at the two major general hospitals in Wichita.
- A site visit in New Mexico to investigate the University of New Mexico program, which is an AEGD program similar in approach to the model envisioned in Kansas (e.g., a dental residency possibly affiliated with another health professions program rather than a dental school).

A comprehensive list of interviewees and data sources appears in Appendix D.

Section Two

Feasibility Analysis & Recommendations

Part One: Residents

1.1. Background

Dental schools in the United States graduate more than forty-three hundred students each year. Applications to dental schools have been steady for the past five years and have shown an increase over the past 10 years, including a remarkably large increase in applicants for admission to dental school in 2006. Demographic evidence combined with access to care issues as documented by Oral Health Kansas and other groups indicates that this increased interest in dentistry is likely to continue for some time into the future.

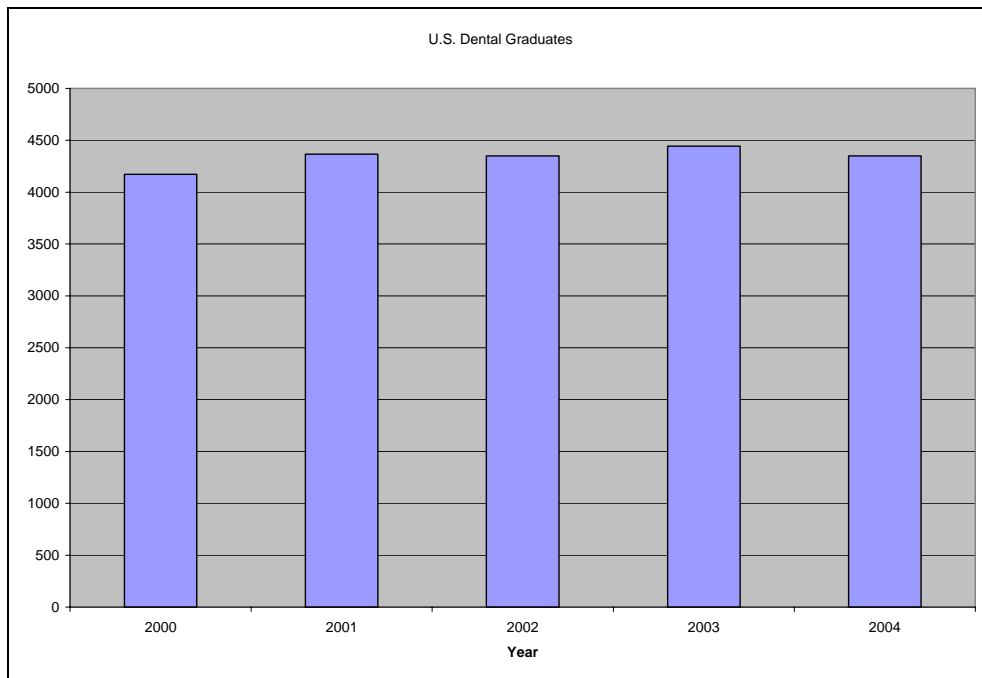


Figure 1. U.S. Dental Graduates, 2000-2004¹

Although licensable to practice as fully-qualified dentists immediately upon graduation, an increasing number of dentists seek post-doctoral training through a residency program. Figure 2 shows that the percentage of dental school graduates seeking further education is approximately 48%, based on 2004 data, and that the number has been increasing slowly in recent years. State licensing laws, professional certification requirements, and the increasing complexity of oral health practice combine to propel this trend into the future, and our evidence based on preliminary anecdotal data is that the number of dentists looking at post-doctoral training is as high as 58% in 2005.

¹ Note: Two new dental schools, one in Nevada and the other in Arizona, will begin graduating dentists in 2006, increasing capacity by approximately 100.

There are 45 AEGD programs in the country associated with Dental Schools and 15 AEGD programs not affiliated with a Dental School and not located on military bases. In terms of the program size, the average AEGD program is of one year's duration and serves approximately 8 students. It is typical that at the beginning, a new program would aim for four students and increase from there once the program is solidly up and running.

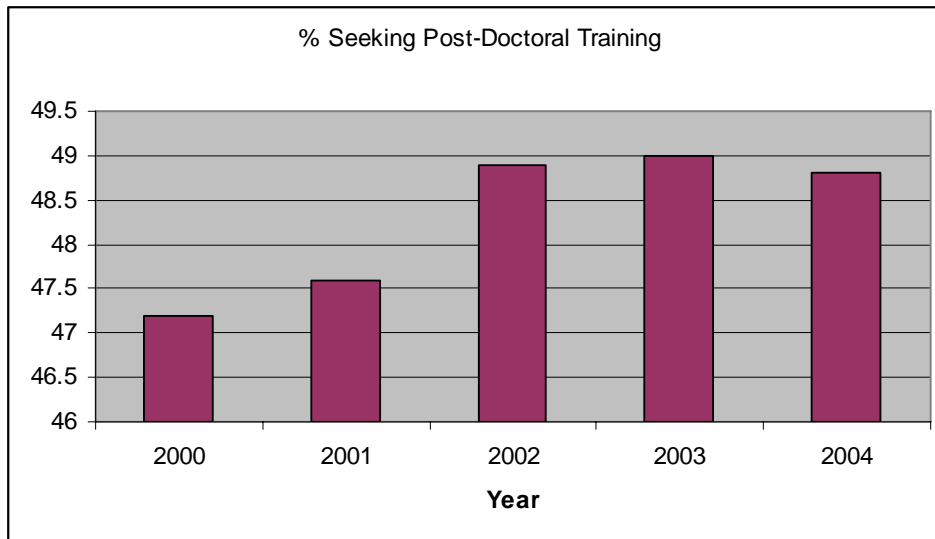


Figure 2. Percent of Dental Graduates Seeking Post-Doctoral Training, 2000-2004.

The above figures merely indicate that the number of dental graduates in the U.S. remains constant while the proportion of graduates seeking post-doctoral training is slowly rising. The most compelling data helping make the case for a Kansas AEGD to have success in attracting residents comes from the ratio of applicants to openings in AEGD programs. Figure 3, showing data from 1999 through the most current year available, 2003, clearly shows that the always substantial gap between applicants and positions is actually expanding.

It is possible, even likely, that the number of applications in Figure 3 over-represents the actual number of applicants because of duplication. Even so, if one statistically corrects for expected duplications, the estimated number of applicants is still more than five times the number of admissions.



We recommend the AEGD program begin with a class size of four residents, and that it offer a second year option as soon as financially possible.²

Because of the strong interest in meeting the goals of increasing service to the underserved in the state of Kansas and to increasing the likelihood that dentists might choose to remain in Kansas and even consider locating in more rural areas, we suggest considering an optional two year AEGD model – the first required, the second elective – where the goal would be to send second year residents to counties in Kansas that are suffering a severe shortage of dentists. In order to develop this model, it would mean that rural dentists would become faculty and help to provide training using their offices as a clinical site. Second year AEGD residents would be highly skilled and able to work very independently, but would still need some minimal level of supervision.

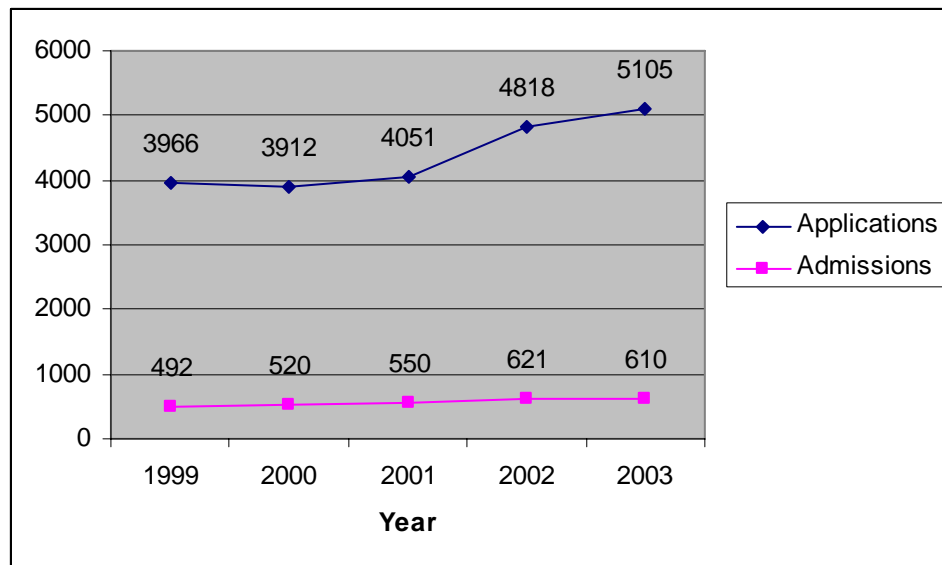


Figure 3. Applications and admissions to AEGD programs, 1999-2003

This community-based training model has been used very successfully in New Mexico in their medical residency programs. The data collected indicates that residents who spend part of their residency in rural areas with local supervision have an increased likelihood of remaining in New Mexico and of opening a rural practice or buying an already-existing rural practice. As with many things, familiarity increases the likelihood of choosing a rural practice option.

² The “lightning bolt” symbol to the left denotes a specific Triangle Associates recommendation appearing in boldface italics.

Attached are data obtained from an on-line survey of 42 dental students and 4 AEGD residents from nearby programs. In summary, 14 respondents were likely or highly likely to apply for an AEGD program upon graduation. Forty students said they would consider Kansas for a residency program, were there to be one. Eighteen students said a waiver of the clinical portion of the licensing exam upon completion of the program would be a very strong incentive to choose the Kansas program. Other incentives are listed verbatim in the attachment but money, loan repayment and the focus of the residency were all key issues.

Part Two: Faculty & Staff

2.1 Staffing

2.1.1 Administration and Faculty. The indispensable faculty requirement is a qualified program director (see Appendix E for a sample position description), responsible for:

- a) program administration
- b) development, implementation, and supervision of the curriculum plan
- c) ongoing evaluation of program content, faculty teaching, and resident performance
- d) evaluation of resident training and supervision in affiliated institutions and off-service rotations
- e) maintenance of records related to the educational program
- f) resident selection.

While it is not required that the program director be full-time, s/he must demonstrate to the accreditors that his/her commitment to the program provides sufficient time to accomplish those assigned duties. A documented time schedule with specific allotments of time for each duty should be available. The consultants strongly suggest that the program director for a new AEGD be on a full-time basis as the work of seeking accreditation, applying for possible federal funding, developing a curriculum, and recruiting clinical faculty and residents is very time intensive in the first one or two years.

The program director must have completed an accredited AEGD or GPR program as part of his/her training (or have previously been an AEGD program director), as required by the accreditation requirements. Between the program director and any other program faculty there must be faculty supervision present at all times that residents are treating patients. Faculty must predominantly (in supervisory FTE terms) be general dentists.

Faculty with certificates of training in the dental specialties are not required, but the program faculty must be able to demonstrate that they have sufficient background for specialty procedures they would be responsible for supervising and/or teaching, beyond what might be expected from dentists in general. Documentation of such background might come from continuing education or similar postgraduate experiences.

Therefore, it would appear that the absolute minimum faculty that could suffice for initial program accreditation would be a full-time director with appropriate background, and a combination of general dental faculty equivalent to 1.0 FTE, recognizing that it is essential for qualified faculty to be present for all clinic sessions. In most programs, that would mean every day the program is in operation.

In addition, it is advisable to have qualified specialists on the faculty, especially in periodontics and endodontics. These specialists do not have to have a major program commitment (could be as little as once a month with the program), but without their participation in the curriculum accreditation might be jeopardized (depending on the strength of the specialty-related qualifications of the general dental faculty). Additional part-time faculty in specialty areas that would strengthen the program are oral and maxillofacial surgery and prosthodontics. Attending specialists in pediatric dentistry and orthodontics are generally not as important to overall faculty qualifications.

It is an advantage to have expertise in the placement and restoration of implants, as this can be very important to a good clinical revenue stream, and is increasingly important to advanced dental qualifications. Without expertise in implant dentistry, a program would be handicapped in the recruitment of residents, who will for the most part be looking for that kind of training.

Faculty must be qualified for (and obtain) appointments (and credentials if necessary) in the sponsoring institution(s). They will also have to be licensed to practice dentistry in Kansas, as will the residents unless present law or State Board regulations are changed. A number of states make this exception for residents in accredited training programs, and it would be an advantage to recruitment to seek this exception in Kansas also.

There are dentists in the Wichita community who are both general dentists and specialists who have indicated an interest in being part-time faculty for the program. The program director might need to be recruited from elsewhere because, as stated above, the director must have experience in an

AEGD or GPR program, but there is a strong possibility that most, if not all, supervising faculty could be obtained locally.

Attracting faculty from outside the Wichita community would be dependent on a number of factors: the university affiliation with all its attendant benefits; the facilities and affiliations; the ready ability to begin seeing patients and generating revenue; and the ability of the sponsors to generate excitement about living and working in Kansas.

- 2.2.1. **Allied and Ancillary Staffing.** Experience with “four-handed dentistry” must be included in the residency; therefore, there must be at least one qualified dental assistant at each site when procedures are occurring. The closer one could come to one assistant for every resident operating in the clinic at any given time, the greater a recruitment and revenue advantage for the program. It would be beneficial from both training and revenue perspectives, but not essential, to have a dental hygienist. There must be “front desk” staff to handle business and patient traffic, i.e., appointments, billing and collections, and record keeping. If the program operates at more than one clinical site, it would be an advantage to establish a central staff to handle all billing and collections. We do not recommend using existing billing services available, such as those through hospitals, as these are usually inexperienced at charging for dental services rendered to outpatients.

Part Three: Academic & Hospital Affiliations, & Accreditation of Program

2.1 Academic Sponsorship

The program should have an academic home for purposes of faculty appointments and to ensure its ongoing academic integrity. A residency program need not be affiliated with a dental school, though the University of Missouri – Kansas City School of Dentistry could be considered a resource for portions of the program curriculum. There are currently two logical institutions in Wichita for academic sponsorship of the residency: the University of Kansas School of Medicine—Wichita and Wichita State University.

The School of Medicine currently operates several residencies, principally housed at either Wesley Medical Center or Via Christi Regional Medical Center. At least one other very similar AEGD residency in New Mexico has its academic home in the Department of Surgery within its medical school. Wichita State University operates a dental hygiene program as part of its School of Health Professions, and has a nearly-new, fully-equipped dental clinic on its campus.

Both of these universities would offer advantages and disadvantages as host to the AEGD program. While the medical school operates existing residencies in other fields, there is no natural link between an AEGD program and medical specialties in the way that there is, for example, with an oral and maxillofacial surgery residency. Wichita State University, while operating a very well-equipped dental hygiene clinic and program, is not otherwise in the business of managing residencies. Though the university president was enthusiastic about sponsoring the AEGD program, he also stipulated that it not cost the university resources.

It should be noted that the University of Missouri – Kansas City, in addition to a dental school, has an AEGD residency located near its campus. Two factors mitigate compellingly against affiliating the program with UMKC: 1) That university is funded through public resources in Missouri and not Kansas, therefore its mission dictates a first priority on the needs of citizens in Missouri; and 2) Because its AEGD program predates the federal graduate medical education funding law, an affiliated program would also be ineligible for this important source of revenue (see Section 2.5.1.2 below).

Therefore, given the above, the choice of academic home would seem to be a function of several criteria:

- At which institution would the program stand out; that is, where would its stature amid other programs be nearest the top?
- Which institution most enthusiastically *wants* the program?
- Which university has the greatest depth of experience with dental programs?



Because of the stature the residency would likely have with its portfolio of programs, the receptivity of the university administration and the familiarity with dental programs of the dean of the School of Health Professions at Wichita State University, we recommend that the program affiliate with that institution.

Note: Should this arrangement prove unworkable for any reason, the option of affiliating with the medical school should be kept open.

2.2 Hospital Affiliation

It is a requirement for graduate medical education (GME) fund eligibility that these monies pass through an administering hospital (see Section 2.5.1.2 on revenue streams). While some programs nationally have affiliated with hospitals in other states, it is generally more desirable that a residency program affiliate with a nearby hospital, preferably one that could provide additional resources for the program.

The consultants visited the two large general acute care hospitals in Wichita, meeting with senior executives and, at one site, the administrator responsible for its existing residency programs. Both hospitals have medical office buildings either adjacent to their main buildings or on the same campus.

Wesley Medical Center is a more than 700-bed medical/surgical hospital located slightly to the northeast of downtown Wichita. It houses several residency programs for the University of Kansas Medical School—Wichita, and has experience with handling GME fund streams. Administrators at Wesley, while interested, were guarded in their enthusiasm for hosting an AEGD program.

Via Christi Health System operates a 900-bed medical/surgical hospital, Via Christi Regional Medical Center, adjacent to downtown Wichita, and also hosts medical residents on rotations. Hospital administrators were extremely interested and enthusiastic about the possibility of hosting an AEGD program, and have in fact identified dental services as a critical missing element among their in-house departments and services.



While either hospital would appear to be workable, the willingness of leadership at Via Christi to host and support the program, combined with the space it is already making available to the program at GraceMed³ leads us to recommend that the residency first seek affiliation with this entity.

Note: As with the choice of academic affiliation above, we suggest that the possibility of sponsorship by Wesley remain open, pending negotiation of an acceptable contract for GME funds between Via Christi and the program.

2.3 Accreditation of the Program

Accreditation for the AEGD program would come from the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA). As soon as possible after a program director is in place, s/he should complete application for preliminary program accreditation. This will require at least minimal staffing and facility plans and a curriculum outline. It would be advisable to import, and modify as necessary, curriculum and preliminary provisional accreditation materials from a willing existing program to facilitate this process. The accreditation application can be completed while site preparation is still incomplete. Preliminary approval from CODA should be in place before the enrollment of the first class. The accreditation criteria are available at the ADA website and also appear as Exhibit A at the end of this document.

³ For more information about GraceMed, see pages 16 and 17.

Part Four: Facilities

2.4 Facilities

- 2.4.1 **General Requirements.** The single most indispensable facility will be at least one completely equipped dental clinic, capable of replicating a well-equipped private dental office environment. This will at a minimum require one operatory (chair, unit for handpieces, water, compressed air and high-speed suction, cabinetry, light, radiograph and viewbox for radiographs) for every resident working in the clinic at any given time. Radiographic equipment must be available, with processing equipment for radiographs unless the machine is completely digital (recommended but not essential). Both panoramic and conventional machines (for periapical and bite-wing exposures) should be included. Equipment for medical emergencies must be on hand. Access to a library with dental reference material is required in support of the training program.

Additionally, a small dental laboratory equipped for pouring and trimming models is almost a necessity (if not, these procedures will be a constant cleanliness problem for the clinic). Sterilization and instrument handling are often combined with a small laboratory in many dental offices. A business office, or at least a “front desk” with record storage capacity, computer, telephone, facsimile, photocopy and other usual business equipment will be needed. Each site should have sufficient storage space for miscellaneous equipment and an inventory of supplies.

- 2.1.2 **Existing Resources.** A review of existing facilities potentially available for dental services in Sedgwick County revealed the following:

Hospitals

- Wesley Medical Center, a comprehensive acute care medical/surgical hospital with several adjacent and remote medical office buildings. Owned and operated by the for-profit HCA.
- Via Christi Regional Medical Center (St. Francis campus), a comprehensive acute care medical/surgical hospital with several adjacent and remote medical office buildings and related campuses for various specialty services around Wichita. Owned and operated by the not-for-profit Via Christi Health Care System.

Neither hospital currently has a dental service. While there are other smaller hospitals and specialty facilities in and around Wichita, none were deemed by the consultants to be appropriate for sponsoring or housing an AEGD program.

Safety-Net Clinics

Five safety-net clinics in Wichita provide services to the region's uninsured and underserved populations.

Hunter Health Clinic, Inc. “The Hunter Health Clinic, Inc., is a 501(c)3 non-profit corporation providing medical, dental, mental health, substance abuse, medication, transportation and social services.

“Originating in 1976 at the Mid-America All-Indian Center and known as the Wichita Urban Indian Health Center, Native Americans were served exclusively.

“In 1985, the health center was expanded to serve all persons and renamed in honor of Jay and Vera Hunter, active Native American and community leaders. That year, the clinic received federal funding becoming the first Community Health Center in Kansas.

“With new federal funding in 1987, Hunter expanded services for homeless persons. In the 1990's, additional sites were opened with Hunter currently operating four satellite clinics.

“From Hunter's early years of volunteer medical providers using two rooms in a small strip mall, Hunter Health Clinic has grown to 77 employees serving 24,746 active patients. Hunter delivered 51,721 services to 15,567 individuals in fiscal year 2003, and trained 80 residents and students.” (Source: the Hunter Health, Inc., web site, <http://www.hunterhealthclinic.org>.)

Hunter Health Clinic is the only Federally Qualified Health Center (FQHC) in South-Central Kansas. Homeless and American Natives receive medical and dental treatment without charge; others are charged on a sliding scale. Charges can be to third party payers. One recently hired dentist, a dental hygienist and an assistant staff the clinic. Since the current dentist has been there a fair range of dental services are provided, but not including fixed prosthodontics or implants. The clinic will be the site of a pilot project for electronic health records using the Veterans' Administration's Vista system, which could provide a good learning experience for residents. The clinic also has a high patient census of diabetics, which also could provide useful training to residents. A new facility for the clinic is in the planning stages. It is currently projected to have 8-10 dental operatories, presumably with new equipment, and plans to accommodate three dentists and four hygienists. One might anticipate significant difficulty in attracting those

professionals, most likely leaving plenty of room for rotation of AEGD residents if the program so chooses. The patient mix is 70% uninsured, 30% insured. Of the insured, most are receiving medical assistance (Medicaid), leaving only 5% of the patient load with private insurance. The clinic places no restrictions on ability to pay in order to receive services. AEGD residents could anticipate a fair range of experience in providing dental care through this clinic, but could not anticipate much in the way of “high end” services. Given the patient mix, and absence of coverage by Medicaid of adult dental care in Kansas, it would not be a revenue-producing rotation for the program. Some rotation to this clinic could be a part of the AEGD program, but should not be the major part of any resident’s experience.

GraceMed Health Clinic, Inc. “GraceMed Health Clinic has provided health-related services to the Wichita community since 1979. The clinic was founded under the umbrella of the United Methodist Urban Ministries. Originally known as the Hispanic Clinic, patients were cared for one night per week at the St. Paul United Methodist Church. In 1980, a second clinic was staffed by volunteer physicians on nights the Hispanic Clinic was not operating. In 1983, Dr. and Mrs. Piburn, medical missionaries returning from Africa, volunteered to staff the clinic three days per week. The clinic became unofficially known as the Piburn clinic during this time. United Methodist Urban Ministries purchased a building at 1611 North Mosley and the clinic was relocated to its current facilities in 1988.

‘As the community need for low-cost health care grew, the clinic evolved from a volunteer program into a full-time operation. Providing health and dental care is an expensive endeavor. In the process of seeking new funding, the clinic applied for and received designation as a Federally Qualified Health Center (FQHC) look-alike. This program provides higher reimbursement for services provided to Medicaid and Medicare patients. In order to receive this designation a Board of Directors that is comprised of 51% consumers and governance separate from any other agency was required. The decision was made to set the clinic up as a separate non-profit corporation and pursue the FQHC designation. In July of 1994, the clinic officially became known as United Methodist Health Clinic of Wichita, Inc.

‘The clinic's separation from United Methodist Urban Ministries was not widely known. In 2003, eight years after the separation, individuals in the church and the community were unaware of the separate agencies. As a non-profit organization that is dependent on grants and donations to subsidize its mission, a new identity became essential. In

June 2003, the clinic legally changed its name to GraceMed Health Clinic, Inc.’ (Source: <http://www.gracemedclinic.org>)

GraceMed’s dental clinic is currently small and somewhat outdated, but it is moving soon to a new location on Via Christi’s St. Francis campus. The new location will have six dental operatories and has space for 4-6 more in the future. The operatories will be fully equipped with new equipment, including conventional (not digital) radiological equipment and necessary support space and facilities. The clinic is an “FQHC look-alike” in function, but does not receive FQHC federal funding. It currently has one full-time dentist employed, plus some volunteer dentists in evening hours, and one support staff. Hiring of an additional support staff person is planned when the move to the new facility is completed. A fairly full scope of dental services is provided, but currently not including fixed prosthodontics, periodontal therapy or implants. Patients can be charged on a sliding scale. This clinic offers exciting possibilities for accommodating AEGD residents from a clinical space perspective, theoretically offering total accommodation for clinical and classroom activity without initial outlay by the program. Being close to a Via Christi hospital also offers potential for mutually beneficial interactions among the AEGD program, the hospital and GraceMed, including experience with dental emergencies and other potential hospital experience. Such arrangements may also provide positive incentives for Via Christi to include the program in its GME funding, although such incentives might be derived in other ways also. The advantages will need to be weighed against the need for the AEGD program to produce its own clinical revenue and the likelihood that full-pay patients likely will not want to come to a safety-net clinical environment. However, one could envision a significant base for the activities of the AEGD program in the GraceMed facility as long as there was another facility for private practice of program faculty and full-pay patients for upper level services provided by residents, for example, fixed prosthodontics, implants, periodontal surgery.

Sedgwick County Health Department Children’s Dental Clinic.

“The Children’s Dental Clinic provides free dental care to eligible children from Wichita and Sedgwick County Schools. To be eligible children ages 5-15 cannot have private dental insurance, Medicaid, or Kansas Healthwave and must qualify for the free or reduced lunch program at their school. The school nurse makes referral for children to participate in the clinic. Wichita State University dental hygiene students receive clinical experience and instruction as they provide preventive care under the supervision of the staff hygienist. Over 33 volunteer dentists and oral surgeons from the community donate their

time and services to provide children restorative and extraction needs.” (Source: <http://www.sedgwickcounty.org/healthdept/children.htm>.)

The Sedgwick County Health Department’s dental clinic provides basic dental services for children who have no dental insurance or medical assistance on referral from a school nurse, and children less than 5 years of age on a walk-in basis if they live in Kansas and have very low family income. A goodly number of these children are undocumented. All services are free of charge. The clinic director is a dental hygienist, who together with another hygienist, provide services they are legally allowed to do plus efforts at oral health education. Dental hygiene students from Wichita State University also rotate through the clinic 2-4 days per week. There is no dentist on staff, but volunteer dentists provide services on Friday and some evenings. The clinic has three operatories reasonably equipped and supplied for dental hygiene services and basic dental care, although the basic equipment is nearing fifteen years of age and will need replacement in the next few years. Supplies are adequately available for the services provided. A small combination dental laboratory/darkroom is present. There is no space available for clinical expansion, although there is one room that is presently used only for storage. The clinic director indicated that storage would be a real problem without using that space for that purpose. When a dentist is present s/he uses one of the operatories that otherwise would be occupied by a hygienist or hygiene student. While the volunteered effort is laudatory, it is insufficient to meet simple restorative dentistry needs. Rotation of an AEGD resident could assist in meeting that need. However, the range of services provided is narrow and very basic and patients are children only, so such a rotation would not provide educational benefit to the residents beyond a small proportion of their time. None of the volunteer dentists are pediatric dentists. As all services are free to the beneficiary, no revenue to an AEGD program would accrue from rotation to this clinic, and time there would mean absence from other potentially revenue-generating sites. A reasonable projection might be a day per month for resident rotation.

Of the above, there are three clinics that expressed an interest in hosting some or all of the residents (GraceMed, Hunter Health and the Sedgwick County Health Department). Of the three, GraceMed would appear to offer on one site sufficient space to begin the residency program, either in its new operatories or by build-out of available adjacent space. Hunter Health could be a rotational site, particular since it would expose residents to the Native American population, another underserved group, but would not have sufficient space in its current building to host a program start-up. The county health department serves only children, and, as such, is of limited usefulness to AEGD residents.



We recommend that the program primarily locate in the new GraceMed building adjacent to the Via Christi hospital campus, with a minimum of four dental operatories reserved for residents.

Regardless of how attractive the space or sophisticated the equipment at GraceMed, it should be noted that many patients with insurance or the means to self-pay will likely be unwilling to seek services at that site. Because these patients are crucial to the programs financial viability and meeting the educational requirements of the residency, additional operator space should be located, preferably in or near the sponsoring hospital. Our conversations with executives at both Wesley and Via Christi lead us to believe that space can be made available for an office in either hospital or their medical office buildings.



We recommend that a two-chair “upscale” dental office suite be created within the Via Christi buildings.

Part Five: Finances

2.5 Finances

2.5.1 Revenue

2.5.1.1 *Capital for start-up.*

One major determinant of the amount of capital required for start-up is the degree of build-out required for clinic space. Costs of this sort are difficult to pinpoint because the exact nature of the construction is as yet unknown. Many factors will influence this figure, including: existing space configuration and utilities, willingness of a hospital or safety-net clinic to share space, and the exact number of square feet involved. Once known, this amount should be added to the equipment budget for a full start-up capital total. (For instance, a medium-sized dental clinic could require 2,000 square feet. If build-out is \$80 per square foot, then an additional \$160,000 in start-up capital will be needed to cover this cost.)

The program should also take advantage of a start-up grant if they remain available from HRSA through Title VII. For example, forty grants totaling \$8,080,063 were awarded in FY 2005 to assist dental schools in planning and operating general dentistry and pediatric dentistry residency programs. Twenty-two pediatric

dental residency programs were awarded \$4,656,544 (6 new awards totaling \$1,312,133 and 16 continuing awards totaling \$3,344,411) while 16 general dentistry residency training programs were awarded \$3,423,519 (7 new awards totaling \$1,484,293 and 9 continuing grant awards totaling \$1,939,226).⁴

Those grants can provide initial support for many program costs, including resident stipends, staff (including assistant, clerk and hygienist), and small equipment (e.g., computer). A skilled grant writer might even be able to justify some portion of construction costs. If the program director is not experienced with HRSA Title VII grants, it would be a good investment to contract with someone who is to produce the grant application. Unfortunately, the FY2006 federal budget reduced total Title VII programs by 33.8% from the preceding year. This will make it correspondingly more difficult to achieve success in an application for a start-up grant in '06 than in '05, and there can be no assurance that there will be any rebound in funding for '07 or '08, the most likely federal budget year for potentially funding an AEGD start-up grant in Kansas. Nonetheless, the program in Kansas could make a compelling case for what an AEGD program could do to enhance care for the under-served and potentially address oral health manpower concerns in the state.

Also, a number of foundations or other nonprofit funding groups with an interest in oral health care issues exist in Kansas who could be approached for one-time start-up capital. Assuming both a match between the goals of the AEGD residency and the funding priorities of the organization, a consortium of groups could share start-up expenses in a way that would minimize the impact on any one foundation's gift.



We recommend that the program director make application to HRSA for start-up capital. Should start-up funding either not be available through HRSA, or be insufficient to cover the entire cost of start-up, or not be available in a timely manner, then we recommend assembling a consortium of funders to make one-time grants for the purpose of building and equipping the AEGD facilities.

2.5.1.2 ***Ongoing operations.*** There are essentially four sources of revenue for an AEGD residency program: Income from clinical

⁴ Source: *ADEA Washington Update*, October 24, 2005.

activities (billable services), graduate medical education (GME) funds available from federal sources, ongoing public appropriations for operations from either state or local funding sources and grants by non-profit funders.

Clinical income is indispensable for financing this type of program on an ongoing basis. An efficiently run clinical program that includes dental implants should generate \$60,000 to \$100,000 gross revenue per annum per resident. Overhead (total) for most dental practices is in the 60-70% range for solo practitioners. A multi-resident clinic should do better than that because of the sharing of some overhead items (e.g., basic facility costs, staff sharing). The figures above are for a program that has a relatively low census of Medicaid or indigent patients. If the program has a high proportion of Medicaid patients, or those unable to pay full fees, the clinical revenues will be correspondingly lower.

Because this would be a new program, it can take advantage of GME (graduate medical education) support by establishing an enabling contract with a hospital (does not have to be the same as the sponsoring institution). It could also do this by being a hospital-based program. There is no cap on dental residency numbers as there is for medical residents. CMMS (the federal Center for Medicaid and Medicare Services in DHHS) will pay the hospital actual documented costs for resident stipends and faculty supervision of clinical services rendered, plus indirect costs at the hospital's established GME rate through Medicare. If the AEGD is an "off-site" program (with respect to the hospital) a contract between the hospital and the program is used to transfer money from the hospital to the program. Legal assistance to establish a good contract would be necessary, but shouldn't exceed \$20,000. That is a small fraction of the GME revenues that can be realized. Legal expertise is available and should be obtained from someone familiar with this kind of negotiation and with a proven track record of success. Even if the program is hospital-based, an initial contract or memorandum of understanding to assure the amount of GME revenue the hospital dedicates to the program would be advisable.

In addition, it is important to remember that GME funding follows a three-year "rolling average" format, where the hospital will receive one third of the eligible funding in Year One, two-thirds in Year Two and all in Year Three. Therefore, additional funds beyond GME will be needed to supplement operations during Years One and Two, either from outside sources or support from

the hospital. The pro forma herein takes into account the rolling average which appears as a larger deficit in Years One and Two.



We recommend that the arrangement between the program, its sponsoring academic institution, and the hospital handling the GME contract be formalized through a written contract prior to starting the program.

- 2.5.1.3. ***Timeliness.*** Many of the key activities described above are time-sensitive. For example, the Commission on Dental Accreditation reviews applications for provisional accreditation twice each year, and it is therefore crucial that the appropriate documents be submitted on time. Appendix F contains a timeline illustrating how we envision this and other tasks in sequence, working toward an earliest possible opening date for the residency of August 2008.

Both the GME contract and a HRSA grant application if it is to be developed should be completed before the program actually begins. If the program is off-site, and the program begins before a GME contract with a hospital is in place, the program would forever lose its GME eligibility, which would probably be fatal to its financial viability. The program director should also make application for any available HRSA money for start-up capital.

Regardless of success in obtaining GME and HRSA monies, and the possibility of private monies to assist in start-up costs, there would be a necessity for the legislature to consider appropriating monies. There are rolling percentages of costs paid out during the first two years of GME funding, for example. Consequently, those monies would have to be provided up-front to offset costs to the hospital/home institution.

The success of the program will, in part, depend on having adequate financial stability to recruit a program director and faculty and to start and train the first classes of residents. Any revenue streams will take some time to grow. Program sustainability financially will depend on a number of variables, including GME support, the necessity of a practice site where residents (and faculty) can see insured and private-pay patients, the mix of services that can be offered (a function primarily of the qualifications of the supervising faculty), and Medicaid reimbursement rates and definition of eligible populations. A viable on-site private practice for program faculty will be very useful to assuring a good patient mix and for salary

supplementation for the faculty. Other support mechanisms should be investigated also, including attempts to establish contracts with other states or localities within the state.

2.5.2 Costs

- 2.5.2.1 **Capital for start-up.** Assuming a suitable structure (including plumbing, etc.) were present, one could expect to spend up to \$40,000 per operatory, depending on the amount of discount the program may be able to negotiate with suppliers or manufacturers for the basic equipment. Alternatives in used equipment at lower cost might be available for start-up, e.g., from a dental school that is replacing its equipment. Additional miscellaneous equipment would probably come to another \$50,000. A detailed start-up pro forma budget for equipment and supplies appears in Appendix G. Together with the funds for operations during Year Zero, the year before admitting the first class of residents (see pro forma budget in next section), this means that the program will need to raise approximately \$500,000 from a combination of HRSA funds and local sources.
- 2.5.2.2 **Ongoing operations.** A pro forma four-year projection of operating revenue and expenses appears in Appendix H. Year Zero is the year before the first residents begin their training, and primarily includes funds for the program director's salary and benefits, support staff, and recruitment of faculty and residents.

Competitive salary and fringe benefits would be needed for the program director. Salary for a full-time director would be estimated at \$115,000 – \$150,000 (we used a \$145,000 figure for our pro forma budget) annual salary (or the equivalent in salary plus permitted practice revenue) plus fringe.⁵ A usual fringe benefit package will be in the range of 20-35% of salary, and should apply to all faculty and staff who are greater than 0.5 FTE. Besides mandated FICA/Medicare employer shares, health insurance and retirement plans should be the minimal inclusions. For part-time faculty, an annual compensation of \$5,000 per each half day per week that is committed to the program would be a good beginning estimate, although anyone committing more than one day per week may well need more than that. Staff salaries are best established from local sources, as they will be variable depending on local conditions.

⁵ Source: American Dental Education Association faculty salary report, 2003-04 (most recent available) at the 75th percentile adjusted for inflation.

To be competitive for residents it will be necessary to pay stipends, now generally in the range of \$40,000 per annum per resident. Additional compensation in the form of incentive plans for clinical production can be profitable for the clinic if carefully administered, as well as being a positive factor in recruitment of residents.

There will be a need for faculty and residents to access library resources. The library is best managed by access to an existing medical/dental library, even if some small fee for the privilege is involved unless this were to be part of the support offered the program by its sponsoring academic institution. As a less desirable, but still possible back-up plan, well-managed, facilitated on-line access could suffice.

As can be seen from the pro forma, there will likely be a \$1.5 million deficit in expenses beyond revenues in the first three full years of program operation. It appears quite feasible that this amount can be raised through foundations and donors, by appropriations from governmental agencies, and the sponsoring academic and hospital institutions sharing the responsibility, making the total cost to a participating organization quite small in any one year.

Section Three

Community Issues

Part One: The Underserved

We note that a major impetus to the residency initiative is care for the underserved, and that many of the parties funding the feasibility study are eager to see a program established in Wichita are predominately involved with caring for the underserved. Oral Health Kansas and the Kansas Health Institute have available extensive reports on the declining population of dentists in rural areas of the state and the numbers of Kansas residents who are not accessing dental care (for example, more than 40% of adults with incomes under \$25,000 have not visited a dentist in more than a year and 13% have lost all their teeth). The underserved are present in all areas of Kansas. More urban locations, such as Topeka, Wichita and the Metropolitan Kansas City area have increasing numbers of uninsured and medically at-risk persons.

Because we are recommending that the primary service delivery site for residents be in space also occupied by a safety-net clinic (GraceMed), there is every reason to believe that care for the underserved will be an important source of clinical activity. Further, in that residents must provide certain types of care to fulfill the educational requirements of the program, it is very likely that some patients will receive a higher level of care and more services than would today be available through the safety-net clinics alone.

However, the fact that dental services for adults are excluded from Kansas Medicaid coverage means that much of the care for the underserved provided through the AEGD clinic will likely be uncompensated. Therefore, we must caution that while an AEGD residency can increase the volume of care given the underserved, both the educational requirements of the program and the need to generate a minimum level of clinical revenue will decrease that quantity over, say, what a dentist currently practicing at Hunter Health or GraceMed can deliver.

Part Two: Increasing the Supply of Dentists

Ten counties in the state have no dentist as of January, 2005. Most of these counties are scattered on the western side of the state. Further, 17 counties have from 0.1-1.0 full time dentist equivalent. These counties are scattered across the whole state.

As stated above, the ability for an AEGD program to increase access to dental care and eventually to increase the supply of dentists to the state depends on a number of factors, such as:

- Requiring repayment of service in underserved areas for accepting an “in-state tuition” position at UMKC
- Offering loan repayment for graduate dentists who agree to settle in underserved rural areas for a specific period of time

- Offering tuition repayment for residents in the AEGD program who spend a percentage of their time working with underserved populations during their residency
- Offering further tuition rebates or loan repayment for AEGD graduates who agree to locate for a period of time in an underserved area
- Partnering with dentists in rural areas so as to provide supervision and familiarity for dentists and residents who are locating nearby
- Creating a low cost loan program for housing and for office start-up expenses in underserved areas
- Providing assistance for spouses/partners in job location and housing and school location issues for the family

Retention strategies used successfully by programs such as the AEGD residency in New Mexico include a broad spectrum of incentives such as satisfaction of service requirements under the Western Interstate Commission for Higher Education (WICHE) program⁶; low-interest loans for start-up costs to build and supply offices or to buy an existing practice; state financed scholarships which require one year of service per approximately \$20,000 of monies; housing assistance in the form of low-interest mortgages and temporary housing; assistance in finding jobs for spouses; and other types of assistance in partnering dentists who are interested in selling practices with those who are interested in buying.

One further effective and proven way of increasing the likelihood of Kansas residents returning to practice in Kansas is attaching a service requirement to at least some of the slots at UMKC that are reserved for Kansas students. This is standard practice in other states. Some states even require that part of the service be provided in rural or underserved areas or include a percentage requirement that so much of the practice be devoted to Medicaid or uninsured patients. Even if the requirement is one year of service in Kansas for every two years of tuition decrease, it allows the state to receive increased dental access for some period of time and provides a continuous supply of new dentists. Again, once dentists are living and working in Kansas, the state has an increased likelihood of keeping them if additional incentives are provided. We suggest that the Board of Regents seriously consider adding this requirement as the positive benefits to the state are significant.

⁶ For information on the WICHE program, <http://www.wiche.edu>. WICHE is a multi-state compact which allows students to receive in-state tuition at partner institutions, and requires repayment in the form of service. The Kansas AEGD program could become part of WICHE, allowing residents who might owe WICHE service to fulfill a part of this requirement via the program in Kansas.

Section Four

Appendices

Appendix A

Consultant Biographies

Marc T. Frankel, Ph.D.

Marc T. Frankel is a consulting psychologist in St. Louis, Missouri, and is a senior consultant and principal in Triangle Associates. Dr. Frankel trained at Emory University where he received a Ph.D., and at the University of Missouri -Columbia School of Medicine. He consults and coaches with individuals and groups primarily in the health care, education, and technology industries.

Dr. Frankel is lead consultant for Triangle Associates' management of the ESCOP/ACOP Leadership Development Program, and is a faculty member for the NAIS Institute for New Heads and the American Dental Education Association (ADEA) Leadership Institute. Together with Judith Schechtman and John Feely, Dr. Frankel co-founded the School Leadership Program now sponsored by NAIS, and the Missouri Physician Leadership Program for the University of Missouri – Columbia School of Medicine.

Dr. Frankel has been involved in work with dental education for many years, facilitating strategic planning, assisting with clinic redesign projects, and working to enhance both leadership teams and programs at a variety of institutions. Dr. Frankel lives in St. Louis, along with his wife, Jacqueline, and their son, Alexander.

Judith L. Schechtman, M.S.W.

Judith Schechtman is a Senior Consultant and principal in Triangle Associates, St. Louis, a national management firm specializing in leadership and organizational management. Ms. Schechtman trained at Washington University in St. Louis. She is also an Adjunct Professor in the School of Social Work at Washington University. Ms. Schechtman has researched and written on a broad spectrum of topics related to leadership, as well as a variety of clinical issues.

Ms. Schechtman consults and trains nationally primarily in the fields of health care, higher education and independent elementary and secondary school education. She has developed and conducted numerous training programs for hospitals, government, educators and professional associations. Ms. Schechtman is co-founder of the School Leadership program for independent schools and the Missouri Physician's Leadership Program, and is a faculty member for the American Dental Education Association (ADEA) Leadership Institute. She has worked for many years in the field of dental education with a variety of clients, providing strategic planning, team building and

visioning. Ms. Schechtman lives in St. Louis with her husband, Richard. Their daughter is in graduate school in Denver, Colorado.

Richard R. Ranney, D.D.S., M.S.

Dr. Ranney received his dental degree from the University of Iowa, a certificate of training in periodontics from the Eastman Dental Center, and a master's degree from the University of Rochester. He has served as dean of two dental schools, most recently at the University of Maryland (1991-2002). In 2003 Dr. Ranney was a Senior Policy Fellow at the American Dental Education Association (ADEA). He then returned to the faculty at Maryland as a Professor of Periodontics at Maryland while also being ADEA's Gies Education Fellow for 2004-5. Retiring from his faculty position on July 1, 2005, Dr. Ranney was appointed Professor Emeritus.

Beginning his first full-time faculty appointment in 1969, Dr. Ranney has held faculty positions in four dental schools, and served administratively as an advanced dental education program director, department chairman, and assistant dean before being appointed dean at the University of Alabama at Birmingham. He was continuously funded as a Principal Investigator on NIH research and training grants from 1970 until 1986 when he relinquished then currently active grants to accept a deanship. Among his grants as PI was one of the first three specialized clinical research centers funded by NIDR (began in 1978 while at Virginia Commonwealth University). He is an author of more than 150 publications and has made more than 180 presentations locally, nationally and internationally, initially on the immunology, microbiology, clinical genetics and other clinical aspects of the periodontal diseases, and subsequently on issues in dental education and licensure.

Dr. Ranney has served multiple public, professional and private organizations as a consultant, committee member or officer, including being President of both the American (AADR) and International (IADR) Associations for Dental Research, on the editorial boards of five professional journals, advisor to ADEA's Leadership Institute, and inaugural member of the Oral Health Advisory Committee for the State of Maryland. He is a Fellow of the American and International Colleges of Dentists and of the American Association for the Advancement of Science. Also among his honors are the Balint Orban Prize from the American Academy of Periodontology, the Basic Research in Periodontal Disease Award from the IADR, an honorary doctorate from the University of Buenos Aires, the naming of the Richard R Ranney Dean's Conference Room in Maryland's new dental building, and a Presidential Citation from ADEA.

Appendix B

Online Survey of Dental Students

AEGD Interest Survey	<i>Administered by:</i> TRIANGLE ASSOCIATES <small>225 South Main St., Suite 504 St. Louis, Missouri 63105 314-725-8889 info@triangle.com</small>
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On behalf of community groups in Kansas, Triangle Associates is conducting research into dental student and resident interests in a residency program and clinical practice in the state. Your responses to the questions below will help inform the process of determining the feasibility of a possible Advanced Education in General Dentistry (AEGD) residency program. Your answers are completely anonymous and will be compiled by Triangle Associates and reported in aggregate format such that your individual identity remains private.

Your current university affiliation:

---Select School---

Which best describes you:

---Select One---

Where are you from:

---Select One---

If you are not already in an AEGD program, how likely are you to apply to one following dental school?

- Very unlikely
- Unlikely
- Could go either way or unsure
- Likely
- Very likely

If one were available, how strongly would you consider an AEGD residency program in the state of Kansas?

- Not at all
- Somewhat possible
- Possible
- Very possible
- A certainty

AEGD Survey

Would a waiver for the clinical dental portion of the dental licensing exam be an incentive to complete an AEGD program in Kansas?

- Not at all
- A mild incentive
- Helpful
- A good incentive
- A strong incentive

What other incentives could influence your decision to attend an AEGD program in Kansas?

As things stand now, how likely are you to practice dentistry in Kansas?

- Very unlikely
- Unlikely
- Neutral
- Likely
- Very likely

How likely would an AEGD program in Kansas be to attract you to practice in that state?

- Very unlikely
- Unlikely
- Neutral
- Likely
- Very likely

Recognizing that the State of Kansas is interested in increasing access to care for the underserved, what incentives could be offered that would increase the likelihood of your choosing to practice in an underserved Kansas location?

- Tuition repayment
- Office set-up stipends
- Joining an already-established clinic in an underserved area

Other incentives:

AEGD Survey

Please click "Submit Form" below to send your responses to Triangle Associates for tabulation. Thank you!

Submit Form

Reset Form

Send questions or comments to projects@ta-nd.com.
Revised: 12/17/05

Your current university affiliation:

- Creighton University (20)
- University of Missouri - Kansas City (18)
- University of Nebraska (8)

Which best describes you:

- A dental student (42)
- An AEGD resident (4)

Where are you from:

- International (1)
- Kansas (11)
- The Midwest (21)
- The United States (13)

If you are not already in an AEGD program, how likely are you to apply to one following dental school?

- Very likely (11)
- Likely (3)
- Could go either way or unsure (13)
- Unlikely (9)
- Very unlikely (8)

If one were available, how strongly would you consider an AEGD residency program in the state of Kansas?

- A certainty (6)
- Very possible (9)
- Possible (11)
- Somewhat possible (14)
- Not at all (6)

Would a waiver for the clinical dental portion of the dental licensing exam be an incentive to complete an AEGD program in Kansas?

- A strong incentive (18)

A good incentive (8)
A mild incentive (10)
Helpful (6)
Not at all (4)

What other incentives could influence your decision to attend an AEGD program in Kansas?

obviously financial aid in some way
Healthy Stipend / Paid a percentage of production
the resident pay
Financial
national licensure
pay according to production and some ortho experience
Focus of residency (e.g. Implants, Endo, Surgery)
Loan forgiveness
stipend
money/salary, length of program (year or more?)
supplemental income for production
Better Pay than 33% of collections/production
low cost
\$
How much the stipend would be and what benefits would be offered.
Loan forgiveness
tuition payment
competitive stipend and restoration of implants
stipend and criteria
Loan Repayment of some sort
Loan Repayment of some sort
Simply not interested in AEGD
money
variety of exposure in program, stipend, tuition
Loan Forgiveness/Stipend
Top of the line educational experience - excellent facility and rotations in specialties
\$\$\$

As things stand now, how likely are you to practice dentistry in Kansas?

Very likely (3)
Likely (7)
Neutral (11)
Unlikely (9)
Very unlikely (16)

How likely would an AEGD program in Kansas be to attract you to practice in that state?

Very likely (5)

Likely (10)

Neutral (12)

Unlikely (12)

Very unlikely (7)

Recognizing that the State of Kansas is interested in increasing access to care for the underserved, what incentives could be offered that would increase the likelihood of your choosing to practice in an underserved Kansas location?

- Tuition repayment (40)
- Office set-up stipends (24)
- Joining an already-established clinic in an underserved area (20)

Other incentives:

- all of the above would be very helpful
- tuition remission would be wonderful for those who wish to practice in underserved communities. but the new practitioner should be able to control the treatment planning for the underserved population.
- As a KS resident, I appreciate your efforts to better serve the people of KS.
- not interested
- There has got to be something offered for spouses. I am not opposed to serving in a rural area, but the problem (and problem with others students I have talked to) is the convincing of the spouse to follow the DDS out to a rural area.
- Long term tax-based incentives for serving in an underserved area.

Appendix C

Online Survey of the Dental Practice Community

Kansas AEGD Residency Survey

for the Practice Community in South-Central Kansas

Triangle Associates is conducting a feasibility study for a possible Advanced Education in General Dentistry (AEGD) residency program, on behalf of Oral Health Kansas and Sedgwick County Government. We would like your thoughts on several issues as a member of the dental practice community.

Your responses will be treated anonymously and all data go directly to Triangle Associates for tabulation and reporting in aggregate form. If you would like someone from Triangle or Oral Health Kansas to contact you for follow-up, please enter your name, e-mail address, and phone number at the end—otherwise just leave that section blank.

Thank you!

How many years have you been practicing dentistry?

How many years have you practiced dentistry in South-Central Kansas?

Please indicate your degree of agreement or disagreement with the following statements.
 1 - Very Strongly Disagree, 2 - Strongly Disagree, 3 - Disagree, 4 - Neutral, 5 - Agree, 6 - Strongly Agree, 7 - Very Strongly Agree, 8 - Not Applicable

	1	2	3	4	5	6	7	8
1. An AEGD residency program for the State of Kansas is a good idea.	●	●	●	●	●	●	●	●
2. An AEGD residency program should be based in Wichita.	●	●	●	●	●	●	●	●
3. I would be willing to serve as adjunct faculty for part of the training program.	●	●	●	●	●	●	●	●
4. I would be willing to have an AEGD student rotate through my office.	●	●	●	●	●	●	●	●

What is your area of dental specialty?
 General Dentistry
 Orthodontics
 Periodontics
 Endodontics
 Pediatric Dentistry
 Other (please describe:)

Kansas AEGD Survey

What concerns do you have about such a program?

What positives do you envision in having such a program located in Wichita?

Is there anything else you would like to say about a possible AEGD residency program?

Click on Submit Form below to send your responses to Triangle Associates for tabulation. Enter your name and address if you would like us to contact you for follow-up.

Last Name: First Name:

E-Mail Address: Phone Number:

Send comments or questions to project@ta-sd.com.
Created by [Triangle Associates](#). All rights reserved.
Revised: 12/17/05

Total number of responses = 21

How many years have you been practicing dentistry?

Mean = 19.5 years

Range = 8 to 34 years

How many years have you practiced dentistry in South-Central Kansas?

Mean = 15.0 years

Range = 1 to 31 years

Specialization

General Dentistry, 16

Oral and Maxillofacial Surgery, 2

Prosthodontics, 1

Periodontics, 1

No Answer, 1

Rating Items (agreement scale, 1 to 7)

1. An AEGD residency program for the State of Kansas is a good idea. (4.76)
2. An AEGD residency program should be based in Wichita. (4.43)
3. I would be willing to serve as adjunct faculty for part of the training program. (4.85)
4. I would be willing to have an AEGD student rotate through my office. (5.19)

What concerns do you have about such a program? (NOTE: Answers appear in verbatim form—any spelling or grammatical errors were present in the original.)

- competition, but according to published demographics it appears we will need dental professionals in the area. I'd like to see a rural initiative set up to where they can get a stipend or an increased stipend if they agree to practice in an underserved location for a period of time
- where would you build it? how would it be funded
- All of the obvious and not so obvious concerns.
financial support
Long term commitment to the program
quality of education
quality of applicants
- The program would be manipulated for political purposes. The mayor and city council have been hostile to dentistry and fluoridation efforts. Public health is viewed as welfare in Wichita. They will spend \$8 million for Gander Mountain but not bother fluoridating water.
- Advocacy groups have their own agendas.
- No concerns just do it!
- Can we retain the students to practice in a rural area after the program is completed?
- if the point is to encourage students to go to the areas of need then bringing them to wichita is not a good idea , they will want to stay here and set up practices and wont go to underserved areas of need.
- Programs such as this should be based in areas of greatest unmet need in order to provide services to those communities.
- I am concerned regarding a variety of issues. One the ADA has not indicated that there is a shortage of dentists in Kansas. I would be very concerned if these potential AEGD graduates were not required to pass a state board exam. People are talking

about not having disincentives, to keep in from not going to areas in Kansas where there is a need. And lastly I think that I may end up costing more than it is worth.

- One concern is that I would hope these candidates would look outside the Metro areas of Kansas to smaller communities to practice. There will be those dentists who will be threatened by having a training program here, but the benefits are immeasurable to the patients of Kansas--and to the Dental Profession.
- that it can be staffed by qualified clinical instructors with academic experience and that community practitioners would be available to make a commitment to the program.
- Whether the more underserved areas of Kansas will benefit from this program. I don't know if this program will be structured to encourage this, or whether it will just offer additional training for dental students.
- Keeping the residents in Kansas. I believe we have the personnel to run the program locally, my only fear is that we will educate people who will "use" the program and move out after the program. I am sure that a contractual agreement will be utilized. Kansas needs representation in the area of dental education. We have not had enough "spots" open in dental schools to appropriately serve Kansas. However, thanks to UMKC we do have a reciprocal program. But Kansas can not continue to rely on UMKC, Creighton and Neb. forever. This would be a great place to start.
- I think the lack of an established dental school would make this tough to do
- I trained for one year in a General Practice Residency in Providence, Rhode Island. It has been invaluable to me over the past twenty years. I would like to see such a program established here, and believe Wichita would be the best location. If the concern is to train dentist to provide treatment in rural Kansas, then perhaps post-graduate rural service could be require after program completion.

What positives do you envision in having such a program located in Wichita?

- access to cost effective comprehensive care for underserved persons
- we could get some future dentists with some extra training for the community
- expose young dentists to scKS
Increases the stature of dentistry in Wichita
may improve #'s of dentists in underserved rural KS
- It could provide some services to the indigent population.
The program could provide some continuing education possibilities for the dentists of the area.
- the hygiene sschool is here, lots of dds's would help.
- Assistance in treating the population that is more interested in pain management than definative dental care.
- None
- Education is important but I believe in a free market.
- Brings DDS's to Kansas--and to the front porch of smaller communities. Allows them to experience the pace of life and other benefits we all enjoy. Will hopefully keep them in our State. A fantastic opportunity and sorely needed program for Kansas--especially rural Kansas.
- to help the underserved in the community while providing an excellent educational experience.
- There is a greater need in Wichita than in the other larger metropolitan area of Kansas - Kansas City.
There is a large pool of dentist in Wichita to serve a faculty and to offer clinical rotation sites.

- Because Wichita is the largest city in Kansas, a home of an active District dental society and a dental hygiene school/clinic based out of WSU, I feel Wichita is appropriate. Wichita is also the home of a KU Med School-Wichita site. Studies show that Sedgewick co as well as the entire state of Kansas will be underserved very soon. I think that we need to be on the front-end of confronting this issue and not wait until we have a crisis. Kansas NEEDS to be involved with dental education and we can't continue to rely on other states to carry us with regards to an already underserved population
- At the very least it would be bringing new dentists to town who may be interested in staying and practicing here.
- Large population base for the program to serve. Enhancing the residence's training due to existing population of available clinician to assist with the program.

Is there anything else you would like to say about a possible AEGD residency program?

- Let's make it happen!!
you know I am already in favor of the program and am willing to help in any way possible to make it a viable project.
- It would be better done in the Kansas City/Topeka area as a cooperative effort with the dental school.
- The program I attended was top notch. The program was centered on dual scholarly and clinical missions.
- No
- I do not feel that there is a real need in this area for more dentists. We are just now getting over the glut of dentists from the 1980's.
- Bring it on!! No one could do it better than us.
- who would sponsor this program and what clinical facility would be used.
- There are many..many benefits to moving forward with an AEGD program based out of Wichita. I would be more than willing to help see this happen.
- Completing an AEGD did more to improve my clinical skills and confidence than any other step I've taken since graduation
- I think it would be a fantastic opportunity for our community.
- I hope it will come to fruition.

Appendix D

List of Data Sources

Interviews

- Dr. Michael Reed, Dean, University of Missouri- Kansas City School of Dentistry, Kansas City, MO
- Dr. N. Karl Haden, Associate Executive Director, American Dental Education Association, Washington, DC
- Kevin Robertson, Executive Director, Kansas Dental Association, Topeka, KS
- Dr. Donald Beggs, President, Wichita State University, Wichita, KS
- Teresa Schwab, Executive Director, Oral Health Kansas, Inc., Topeka, KS
- Karen Finstad, Executive Director, Delta Dental Foundation of Kansas, Topeka, KS
- Dr. John Reinhardt, Dean, University of Nebraska School of Dentistry, Lincoln, NB
- Dr. Frank J. Ayers, Associate Dean and Director of Admissions, Creighton University School of Dentistry, Omaha, NB
- Dr. Peter Cohen, Dean, School of Health Professions, Wichita State University, Wichita, KS
- Dr. Charles Fox, Associate Dean, School of Health Professions, Wichita State University, Wichita, KS
- Kim Moore, Executive Director, United Methodist Health Ministries, Hutchinson, KS
- Pat Hanrahan, President, United Way of the Great Plains, Wichita, KS
- Denise Maseman, Director, Dental Hygiene Program, Wichita State University, Wichita, KS
- Kathy Mardaga, Executive Director, University of Maryland FDSP (the nonprofit corporation that manages Maryland's dental school clinics), Baltimore, MD
- John Phillips, Facilities Manager, University of Maryland School of Dentistry, Baltimore, MD
- Douglas M. Barnes, DDS, Director of the AEGD Program, University of Maryland School of Dentistry, Baltimore, MD
- Dr. John Killip, Associate Dean for Student Services, University of Missouri – Kansas City School of Dentistry, Kansas City, MO
- Dr. Peter Jensen, Director of the AEGD Program, University of New Mexico, Albuquerque, NM
- Dr. Jorge Wernly, Chair of Department of Surgery, University of New Mexico School of Medicine, Albuquerque, NM

- Dr. Wayne Powell, Health Service Outreach Officer, University of New Mexico School of Medicine, Albuquerque, NM
- Dr. John Russell, Associate Dean of Graduate Medical Education, University of New Mexico School of Medicine, Albuquerque, NM
- Susette Schwartz, CEO, Hunter Health Clinic, Wichita, KS
- S. Edwards Dismuke, MD, MPH, Dean, University of Kansas Medical School—Wichita, Wichita, KS
- Larry Schumacher, President and CEO, Via Christi Medical Center, Wichita, KS
- Claudio Ferraro, Vice President, Strategic Planning and Marketing, Via Christi Medical Center, Wichita, KS
- David Sanford, Executive Director, GraceMed, Wichita, KS
- David Busatti, Chief Financial Officer, and Cindy Ainsworth, Director of Residency Programs, Wesley Medical Center, Wichita, KS
- Christy Hillard, Program Manager, Sedgwick County Health Department, Wichita, KS

Site Visits

- University of Kansas Medical School, Wichita Branch, Wichita, KS
- Wichita State University, Dental Hygiene Clinic, Wichita, KS
- University of New Mexico AEGD Residency Program, Albuquerque, NM, Dr. Peter Jenson, Director
- GraceMed Health Clinic, Inc., Wichita, KS
- Hunter Health Clinic, Inc., Wichita, KS
- Sedgwick County Health Department, Children’s Dental Clinic, Wichita, KS

Surveys

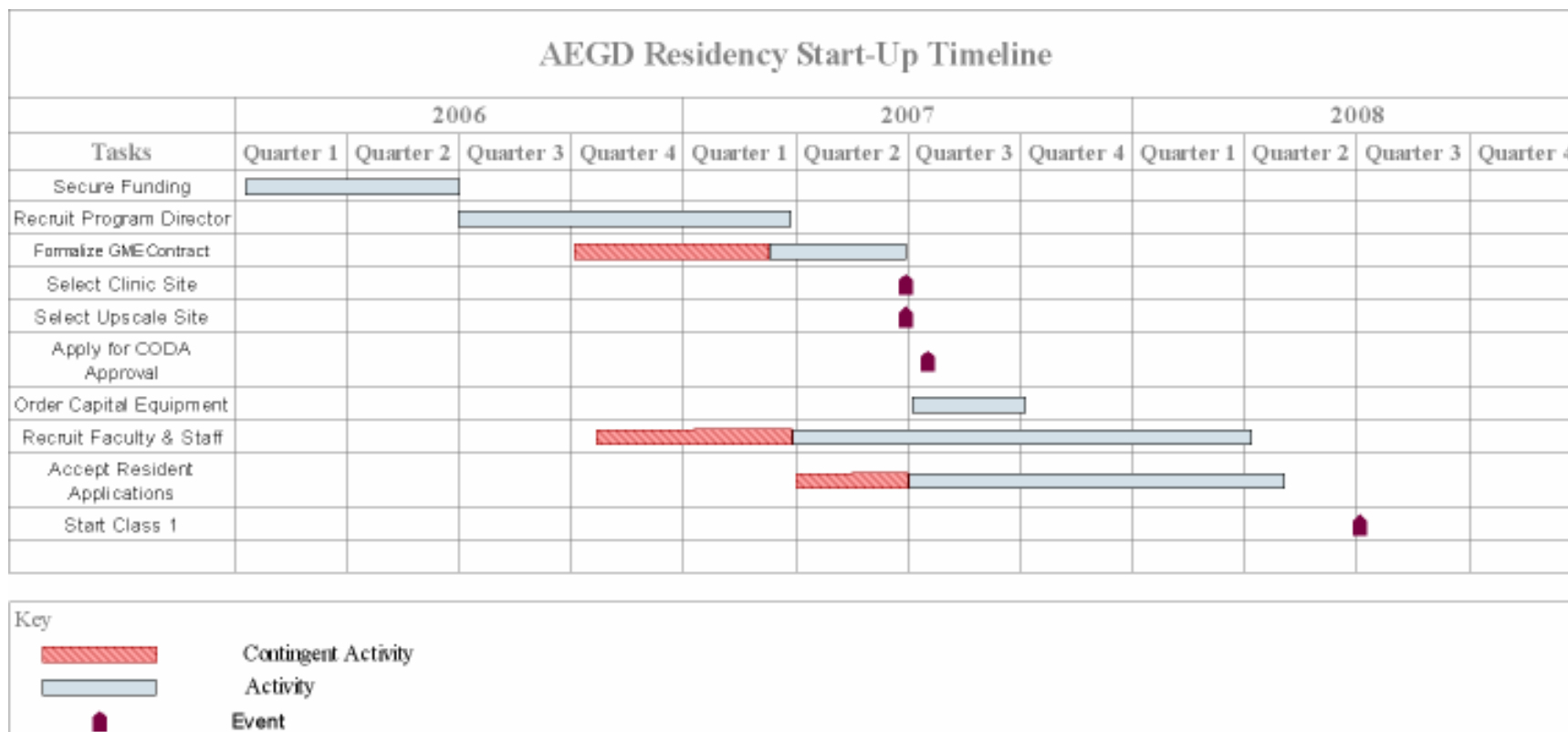
- Online survey of junior and senior dental students at regional dental schools (see Appendix B for a copy of the survey form and data).
- Online survey of practicing dentists in South-Central Kansas, conducted with the cooperation of the Wichita Chapter of the Kansas Dental Association (see Appendix C for a copy of the survey form and data).

Appendix E

Sample Job Description for AEGD Program Director

- I. The Director of the Advanced Education in General Dentistry Program must meet the requirements of the job description for Advanced General Dentistry Postdoctoral Faculty and have received a certificate from a GPR program or an AEGD program.
- II. The Director will be responsive to directives and guidance of the Chairman of Comprehensive Care and Therapeutics and the Dean of the Dental School.
- III. The Director is advisory to the Chairman of the Department and will keep the Dean advised of all necessary information.
- IV. The Director is responsible for the program curriculum and for the supervision of residents of the AEGD Residency Program to ensure resident participation in:
 - A. Clinical duties
 - B. Clinical rotations
 - C. Lecture presentations
 - D. Program and faculty evaluations
- V. The Director is responsible for the coordination of faculty and resident schedules.
- VI. The Director will insure that the residents be evaluated on tri-annual basis.
- VII. The Director will coordinate all necessary departments, offices and staff to ensure the AEGD program is as efficient as possible.
- VIII. The Director will keep the AEGD postdoctoral faculty advised of all necessary information regarding program operations.
- IX. The Director will be appointed to, attend and participate in all committees to which he is assigned, including but not limited to: the Committee on Advanced Dental and Graduate Education.
- X. The Director will participate in such professional development, research and organizations as are judged to be beneficial to their duties and professional advancement.

Appendix F Implementation Timeline



Appendix G
Sample Start-Up Budget for Equipment and Supplies⁷⁸

No.	Description	Discounted ⁹	Est. List
EQUIPMENT			
	Decade 1021 Adec Chair with 2132 Continental		
4	Delivery System	\$6,825	\$15,872
4	Preference 6300 Dental Light	\$640	\$1,488
3	Central Console	\$5,072	\$11,795
4	Doctor's Operating Stool #1601	\$1,240	\$2,884
4	Assistant's Stool #1622	\$1,440	\$3,349
1	Doctor's Lower #5560	\$3,758	\$8,740
1	Doctor's Upper #5633	\$475	\$1,105
4	"C" Storage Lockers	\$6,000	\$13,953
2	Countertop LISA Sterilizer	\$7,200	\$16,744
1	Sonic instrument cleaner	\$325	\$756
1	Countertop Assistant	\$1,000	\$2,326
	Film Processor A/T2000 Plus with Daylight		
1	Loader	\$5,000	\$11,628
4	Gendex #770 X-ray machines	\$10,000	\$23,256
1	Digital Panoramic X-ray machine	\$30,000	\$69,767
1	Model Grinder with Diamond blade	\$1,000	\$2,326
1	Dental Lathe	\$850	\$1,977
1	Whip Mix	\$700	\$1,628
	Sahara Microblaster Laboratory Air Abrasion		
1	Unit	\$1,100	\$2,558
1	Vibrator (Buffalo)	\$200	\$465
	Miscellaneous small equipment		\$10,000
	Total Equipment	\$82,825	\$202,616
INSTRUMENTS			
20	Basic cassettes	\$2,844	\$6,614
15	Periodontics (scaling)	\$3,643	\$8,472
15	Radiology	\$2,741	\$6,374
10	Restorative/Rubber dam	\$6,107	\$14,202
5	Crown & Bridge	\$1,580	\$3,674
5	Endodontics/Rubber dam	\$2,683	\$6,240
2	Basic Oral Surgery	\$1,348	\$3,135
	Instrument Cassette Total	\$20,946	\$48,712

⁷ Not inclusive of build-out, if any.

⁸ Assumes a four-operator clinic; some or all of these capital costs could be reduced if the program shares existing space, as is possible at GraceMed.

⁹ See explanatory notes on the following page.

No.	Description	Discounted ⁹	Est. List
20	High speed handpieces	\$7,520	\$17,488
20	Low speed motor	\$5,640	\$13,116
20	Motor to angle	\$1,135	\$2,640
10	Latch angle	\$1,114	\$2,591
10	Friction grip angle	\$1,157	\$2,691
15	Prophy low speed motor	\$5,640	\$13,116
15	Prophy motor to angle	\$852	\$1,981
15	Prophy angle	\$1,095	\$2,547
15	Prophy torque multiplier	\$1,671	\$3,886
	Handpiece total	\$25,824	\$60,056
10	Reusable composite bur selection	\$258	\$600
10	Reusable crown & bridge bur selection	\$262	\$609
	Bur total	\$520	\$1,209
	SUPPLIES	\$35,000	\$81,395
	TOTAL STARTUP INSTRUMENTS & SUPPLIES	\$165,115	\$393,988

Notes:

Estimates are derived from projected current costs of establishing an external site in College Park, MD, for rotation of AEGD residents from the Dental School, University of Maryland, Baltimore. Estimates assume initial costs for four residents and essentially no equipment in place, but do not include construction or installation costs. Two cost estimates are presented, a discounted estimate derived by assuming an educational institutional discount equal to 43% of list (the approximate average discount received by dental schools from their suppliers), and an estimated list cost based on published prices from major vendors. The Kansas AEGD program should negotiate an educational program discount, but will probably not be able to get as large a discount as does the Dental School because of the much smaller program size.

Estimated costs:

	<u>Discounted</u>	<u>List</u>
Equipment	\$82,825	\$202,616
Instrument cassettes	\$20,946	\$ 48,712
Handpieces	\$25,824	\$ 60,056
Burs	\$ 520	\$ 1,209
Supplies	\$35,000	\$81,395

Total equipment & supplies	\$165,115	\$393,988
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Projected equipment costs are for major equipment, not attempting to account for all small equipment. A \$10,000 (list) allowance for miscellaneous equipment is included for that. The estimate includes no digital radiographic equipment. Costs for that are highly variable depending on what the program would want to purchase. An additional \$35,000 optional allowance would need to be added digital radiographic capacity is to be included.

Appendix H
Clinic Operating Pro Forma Budget, Years Zero to Three¹⁰

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
REVENUE				
GME funds	\$0	\$103,500	\$207,000	\$310,500
Clinical services	0	320,000	336,000	352,000
State or county appropriation	0	0	0	0
Private grants	0	0	0	0
Total Revenue	\$0	\$423,500	\$543,000	\$662,500
EXPENSES				
Salaries & benefits				
Administrative & faculty	210,000	392,000	411,600	431,200
Allied health & support	35,000	148,500	155,925	163,350
Resident stipends & benefits	0	189,000	198,450	207,900
Clinic supplies	0	62,400	65,520	68,640
Laboratory costs	0	101,400	106,470	111,540
Office supplies	3,500	2,100	2,205	2,310
Implant supplies	0	44,400	46,620	48,840
Miscellaneous expenses	1,250	2,100	2,205	2,310
Equipment Maintenance & Replacement	0	6,000	6,300	6,600
Books & Library	2,500	7,500	7,875	8,250
Conference & Travel	4,500	4,500	4,725	4,950
Recruitment Expenses	18,000	7,500	8,250	9,000
Insurance	500	1,800	1,890	1,980
Educational Materials	5,000	5,000	5,250	5,500
Dues and Subscriptions	5,000	5,000	5,250	5,500
Total Expense	\$285,250	\$979,200	\$1,028,535	\$1,077,870
Net Surplus (Deficit)	<u>(\$285,250)</u>	<u>(\$555,700)</u>	<u>(\$485,535)</u>	<u>(\$415,370)</u>

¹⁰ Assumes four residents and one supervising faculty member.

Section Five

Exhibits

Exhibit A

Accreditation Criteria