

A QUALITATIVE STUDY OF EXTENDED CARE PERMIT
DENTAL HYGIENISTS IN KANSAS

A THESIS IN
Dental Hygiene

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of Missouri-Kansas City in partial fulfillment
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MASTER OF SCIENCE

by
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A QUALITATIVE STUDY OF EXTENDED CARE PERMIT

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ABSTRACT

Currently, thirty-two states allow some type of alternative practice settings for dental hygienists. This qualitative study was designed to explore the experiences of the Extended Care Permit (ECP) dental hygienist in the state of Kansas. The snowball sampling method was used to obtain the study participants that involved 9 subjects, one ECP consultant and eight ECP providers. Interviews, document analysis and direct personal experience as a dental hygienist with the development of ECP legislation were utilized for data collection. Seven major categories emerged from the data analysis including entrepreneur registered dental hygienist, partnerships, funding, barriers, sustainability, models of care and the impact of the ECP. The findings of this study revealed that the ECP hygienist has an immense passion and determination for working with underserved and underserved populations and strives to increase access to oral health care within these populations to make a difference.

The faculty listed below, appointed by the Dean of the School of Dentistry, University of Missouri-Kansas City, have examined a thesis titled “A Qualitative Study of the Extended Care Permit Dental Hygienists in Kansas,” presented by Janette Erika Delinger, candidate for the Master of Science in Dental Hygiene Education degree, and certify that in their opinion it is worthy of acceptance.

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CHAPTER 1

INTRODUCTION

Access to oral health care is a long standing national problem brought to the public eye by the first ever Surgeon General's Report on Oral Health released in May 2000 (USDHHS 2000). While preventive measures such as water fluoridation have the potential to reduce the prevalence of caries in the general population, tooth decay remains at epidemic proportions among susceptible populations. The Surgeon General's Report outlines major disparities in oral health in America. For example, childhood caries is the most prevalent disease for children, with decay being five times more common than Asthma and seven times more common than hayfever. Oral disease has a significant social impact as children lose more than 51 million school hours each year due to dental problems and poor children experience 12 times more restricted activity days than children from higher income families. In the adult population, severe periodontal disease (at least one site with 6 millimeters of periodontal attachment loss) affects fourteen percent of those aged 45-54. Employed adults suffered a loss of more than 164 million hours of work each year due to dental disease or dental visits. In the elderly population, age 65-74, twenty three percent have severe periodontal disease.

Multiple factors contribute to disproportional levels of caries, periodontal and other oral diseases. Prevalence and severity of dental disease has been clearly linked to socioeconomic status among all age groups (USDHHS 2000). Inadequate access to care is another factor. For example, approximately five percent of older Americans, age 65 and older currently reside in long term care facilities where dental care is either limited or

nonexistent (USDHHS 2000). In the United States, the pre-dominant delivery model for oral healthcare services is private practice settings, where in 2006, an estimated 91.8% percent of practicing dentists currently work (ADA 2008). Distribution of practicing dentists is also problematic and according to the U.S Department of Health and Human Services an estimated forty-nine million individuals live in areas lacking adequate dental care services, as reported by Health Professional Shortage Area (HPSA) criteria (USDHHS 2011). Dental care costs, lack of transportation, and lack of access to dental services are barriers for dentally uninsured and indigent populations. These are just a few of the many barriers to oral health care that affect a wide range of people from the under-served populations (children, adolescents, and adults) to the elderly and homebound. National studies have been conducted in an attempt to gather empirical data regarding the number and distribution of oral healthcare workers and states grapple with the issue of access to oral healthcare services (USDHHS 2000).

Workforce surveys suggest that the number of dentists is declining across the U.S. and the percentage of dentists to patients is decreasing. The collected data from 2006 reported by the Bureau of Labor Statistics noted that there were 136,000 general dentists in the United States. The current data collected in 2008 and reported in the Occupational Outlook Handbook 2010-2011, reported that there were 120,200 general dentists practicing (USDL 2011a) indicating a reduction of nearly 12% of general practitioners in a 2 year period. Nationally there are 4,230 dental Health Professional Shortage Areas (HPSA) with forty nine million people living within them (USDL 2011b). According to the U.S Department of Health and Human Services it would take an additional 9,642 practitioners

(USDL 2011) to fulfill this need for dental providers at a 1:3,000 ratio; a ratio recommended by the Health Resources and Services Administration Shortage Designation Branch (USDHHS 2011). Data suggest that the number of retiring dentists is not being evenly replenished by new graduating dentists. If accurate, this concomitant loss coupled with increasing dental needs will only increase oral health disparities (Rogers, 2009). The prediction from the American Dental Association (ADA) is that there will be a decrease in the dentist-to-population ratio from a high of 55 per 100,000 in 1994 to 50 in 2025 (ADA 2004). Similar to national data on the distribution of dentists, the state of Kansas suffers from a mal-distribution of dentists which has resulted in numerous underserved areas (Fig 1.). With an approximate population of about 2.8 million, 52% of Kansans live within 5 urban counties, 35% live in thirty one semi-urban areas and 13% live in sixty-nine rural counties (KDHE 2009). Examination of Figure 1 shows that, as of July 2009, 93/105, approximately 87%, of the counties in Kansas are designated as a dental health professional shortage area (Kansas Dental Project 2011). A majority of Kansas dentists are concentrated in larger metropolitan areas (Allison 2005). According to a workforce study conducted by the Policy Research Institute at the University of Kansas, urban areas continue to have a significant increase in the number of practicing dentist by about ten percent over the past thirteen years in Kansas, while at the same time the most rural areas have shown a significant decrease by approximately ten percent (Allison 2005). Due to the expanse of the state, especially the Western section, individuals residing in rural areas without a dentist may have to drive several hours to access care. Those in the low socio-economic status category have issues with transportation or are uninsured making dental services out of reach. These issues

are causing organized dentistry to look for answers to some of these barriers and be more responsive to the public, especially the needs of children. Increasing dentists in these underserved areas would be ideal (Allison 2005), however, there are no dental schools in the state and students educated out of state in metropolitan areas are not obligated to establish practice in rural areas. Table 1 demonstrates the number of licensed dentists and hygienists that were practicing in Kansas locations in 2008, 2009 and 2010 (KDB 2011). The number of dentists actually decreased approximately .75% from 2008 to 2009, with a mere increase of only 1.5% from 2009 to 2010. On the other hand, hygienists had a small increase of less than 1% from 2008 to 2009, yet a notable increase of over 13% licensees in the state from 2009 to 2010 (KDB 2011). Kansas currently has five dental hygiene programs throughout the state with three of them being located in rural underserved areas. National data have shown that the number of dental hygiene graduates has increased steadily with a projected increase of 36% through the years 2008-2018 (USDH 2011b). Similarly, the number of graduates in Kansas has increased over the last ten years with the addition of three accredited dental hygiene programs, along with expanded enrollment at existing programs. As a result, utilization of dental hygienists as a mid level oral health provider would seem to be one solution to access to oral healthcare and has been suggested in reports such as the Kansas Health Institute Workforce Survey. Kansas, in response to lack of access and maldistribution of oral healthcare services, passed legislation in 2003 to expand the scope of practice for dental hygienists. Passage of the Extended Care Permit expand the scope of practice for dental hygienists. Passage of the Extended Care Permit (ECP) legislation allows

93 Kansas counties don't have enough dentists.

SOME HAVE NO DENTIST AT ALL.

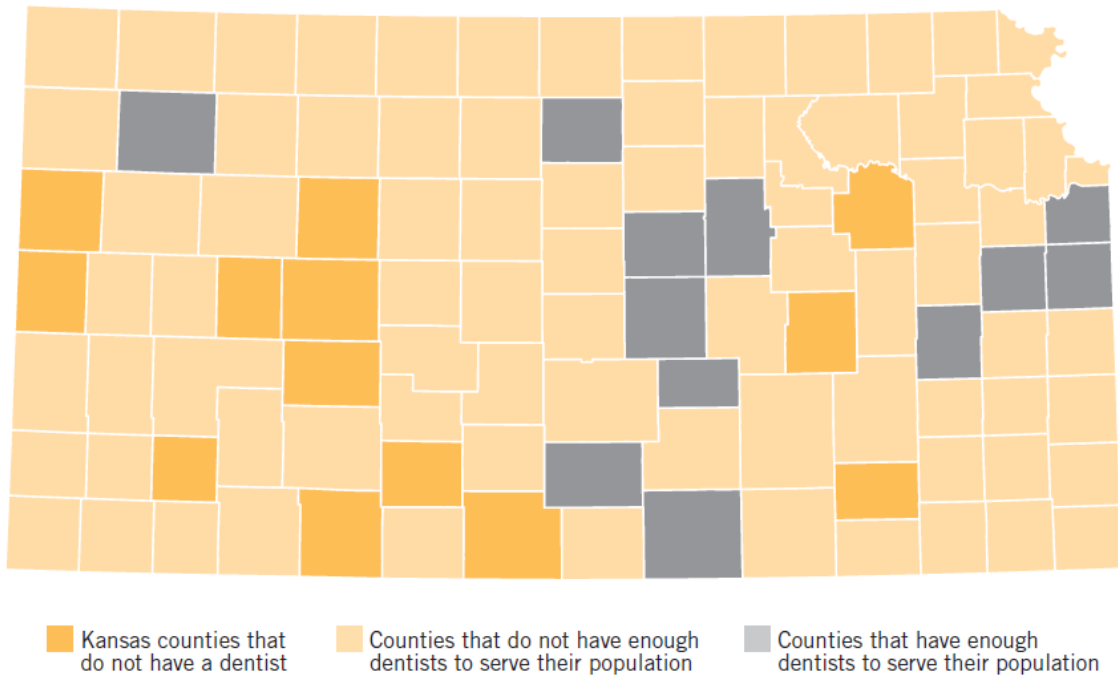


Fig.1. Kansas Map with HPSA Designation. (Kansas Dental Project 2011).

TABLE 1

TOTAL LICENSEES WITH ACTIVE KANSAS PRACTICE LOCATION

TOTAL LICENSEES WITH ACTIVE KANSAS PRACTICE LOCATION	2010	2009	2008
DENTISTS	1425	1402	1413
HYGIENISTS	1750	1542	1529
TOTAL	3175	2944	2942

dental hygienists to provide preventive services, through an agreement with a sponsoring dentist, to access underserved and unserved populations in explicit locations as specified in the dental practice act (Table 2). In 2007, the Kansas legislature passed an amendment to the ECP legislation to expand the settings and populations expanding the scope of practice for the ECP hygienist (KDB 2010).

It has been nearly eight years since the passage of the ECP legislation. Anecdotal reports suggest there are limited number of hygienists with ECP permits, and only a small portion of them are utilizing their permits on a regular basis. Currently neither the Kansas Dental Board, nor any other state agency, have information that identifies what type of programs or activities the ECP providers have established or rendered, nor how many or what populations they are treating with their preventive services.

Problem Statement

The purpose of this project was to explore the experiences of Kansas ECP providers who are offering services to unserved and underserved populations. By doing so, the goal was to illuminate the stories of those with firsthand knowledge and experience in extended dental hygiene practice in order to understand the impact of ECP legislation in practice, the impact it has had on increasing the public's access to oral health care services in Kansas and to define the advantages and limitations of this model as a potential solution to access to oral care in the state.

TABLE 2

DESCRIPTION OF THE KANSAS STATUTES RELATIVE TO
ECP I AND ECP II SCOPE OF PRACTICE AND REQUIREMENTS

<u>Statutes 65-1456 (f) and (g)</u>	<u>ECP I</u>	<u>ECP II</u>
RDH w/ clinical practice in the past 3 years or an instructor at an accredited DH program for 2 academic years within the past 3 years	1200 hours required	1800 hours required
Sponsoring dentist agreement	X	X
Proof of Liability Insurance	X	X
General Supervision	X	X
Removal of extraneous deposit, stain and from the teeth to the depth of the gingival sulci	X	X
Topic anesthetic (certification required)	X	X
Fluoride	X	X
Oral hygiene Instruction	X	X
Assessment and referral	X	X
Other duties as delegated by sponsoring DDS	X	X
Advises patient or legal guardian that these are preventive services, not a diagnosis	X	X
Provides an assessment report to sponsoring DDS	X	X
Payment through DDS or other entity (no direct reimbursement)	X	X
Patients do not need any type of dental examination by a dentist prior to the ECP providing services.	X	X
Perform services with consent on children or adults that fall within the criteria specified by Kansas statute 65-1456(f)	X	X
Perform services with consent on adults that are developmentally disabled or over the age of 65 that fall within the criteria specified by Kansas statute 65-1456(g)		X
Six hours of CE in special needs or other training		X

CHAPTER 2

MATERIALS AND METHODS

Qualitative inquiry was the research design used to explore the experiences of ECP dental hygienists in the state of Kansas. Since the ECP has not been studied empirically to date, a qualitative design was deemed an appropriate approach as this study design allows the researcher to gain an understanding of the phenomena under investigation while culminating in hypothesis generation for future studies of a quantitative nature. The study was conducted in a “natural” setting as opposed to the controlled environment of quantitative research (Lincoln and Guba 1985, Cresswell 1998, Patton 2002). The qualitative design enabled the researcher to gather thick descriptive “information rich” data directly from the participants using the primary investigator (PI) as the research “instrument” by which data was collected. As the research instrument, this design allowed direct engagement with the person under study providing the PI with personal experiences and insights which are an important part of the inquiry and critical to understanding the phenomenon (Lincoln and Guba 1985, Patton 2002). Qualitative design also allowed flexibility due to the open-ended nature of the design. According to Lincoln and Guba (1985), due to the emergent design that is created when doing naturalistic inquiry, there may be a need to simply refine procedures or adjust questions to be asked while conducting the research. The study was approved by the UMKC Social Science Institutional Review Board (Appendix)..

Purposeful sampling was used to ensure that the selection of persons would be appropriate for gaining deep understanding of the phenomena (Maxwell 1996). Specifically, chain sampling or snowball sampling was utilized. To begin this project, the consultant hired

to promote ECP legislation and who has been involved from the early stages of the development of the ECP provider status served as the initial informant. The consultant provided an initial ECP contact and additional informants were obtained from the subsequent subjects. The initial ECP contact identified additional ECP providers who have implemented successful programs utilizing their ECP on a daily to weekly basis. This study interviewed one ECP consultant and eight ECP providers for a total of nine subjects.

Multiple methods of data collection and data analysis, known as triangulation (Lincoln and Guba 1985, Maxwell 1996, Patton 2002) were utilized. Triangulation helped to strengthen this study's validity by using multiple sources of data and confirm findings. Face to face interviews of the ECP providers using a digital recording device, field notes from the interviews, review of the ECP statutes, and the PI's personal experience as having been one of the originators of the ECP legislation served as data sources (Table 3). Data gathered from interviews were transcribed verbatim by a transcriptionist. Transcriptions were given to the participants to review as a way of verifying data and reducing potential bias. This method is termed "member checking" and is critical to the validation process (Maxwell 1996). Once validated, the researcher reviewed data several times to look for emerging patterns to code together. The researcher forwarded the reviewed transcribed documents on to two committee members who also reviewed the documents. The researcher and two committee members met on three occasions. The group individually coded sections of each interview and then compared their data collectively. If the coding was different among them, discussion would take place until consensus was reached. Once the subcategories were developed, seven core themes emerged through discussion and agreement. All committee

members had experience with qualitative research as well as knowledge of the ECP legislation. Termination of further interviews occurred when saturation had been reached and nothing new emerged. The data analysis audit was conducted by a committee member who was enlisted in the beginning of the study, but involved with the audit toward the end of the writing of this paper. The PI and the auditor met on two separate occasions in person and had other communications as well by phone and email. The data validation was confirmed by the audit of the transcripts. The auditor reviewed the broad scope of the data, as well as the deconstruction (unitized and coding) and reconstruction of the material. She found the reconstruction to be incomplete in the paper from the evidence found in the audit trail. Her recommendation was to incorporate additional data into this paper to support the conclusion by means of producing the evidence (more rich data) that was already present in the conducted interviews. An audit trail combined with the audit analysis is an important step in ensuring the dependability and credibility of the data analysis (Lincoln and Guba 1985).

There was a possibility of several limitations. Since the researcher had been active in the professional dental hygiene organization, there were ECP hygienists throughout the state that were familiar with her. Not only was the researcher directly involved as one of the committee members that developed the ECP legislation, she was also the President of the Kansas Dental Hygienists' Association (KDHA) at that time. Since this legislation is relatively new and there is no centralized data collection facility, it was difficult to know where these ECP providers were working or if they were indeed providing the necessary preventive oral health services to those in unserved and underserved populations. In order

to reduce the potential for bias, the triangulation methods were carefully followed to ensure the trustworthiness in the research.

TABLE 3

INTERVIEWS, DOCUMENTS, PERSONAL
EXPERIENCE REVIEWED FOR THE STUDY

INTERVIEWS	DOCUMENTS
1 ECP CONSULTANT	ECP LEGISLATIVE STATUTES
8 ECP DENTAL HYGIENISTS	ECP TOOLKIT
	KANSAS FACTS: EXTENDED CARE PERMITS
	ADHA DOCUMENT OF DIRECT ACCESS UTILIZING DENTAL HYGIENISTS

CHAPTER 3

RESULTS

In order to put the results of this study into perspective, descriptive information about the status of dental hygienists in Kansas holding an Extended Care Permit (ECP) was outlined. There are currently 1750 dental hygienists practicing in Kansas with approximately 124 (7%) possessing an ECP (KDB 2011). Kansas passed ECP legislation in 2003 and is now one of thirty-two states that have statutes supporting direct access for dental hygienists to provide preventive oral health services to specific underserved populations (KDB 2010). The Kansas ECP dental hygienist may provide a prophylaxis, fluoride, sealants and oral healthcare instruction as well as other services within their scope of practice and within the guidelines of the legislation. Of the one hundred and twenty-four ECP providers, forty-three have an ECP I and eighty-two have an ECP II. Each permit has specified requirements in order to apply for each certificate from the Kansas Dental Board (Table 2).

Results from the Data Analysis

The qualitative data analysis of the nine transcribed interviews of one Extended Care Permit (ECP) consultant and 8 ECP dental hygienists resulted in 7 major emergent categories: 1) Entrepreneur RDH, 2) Partnerships, 3) Funding, 4) Barriers, 5) Models of Care, 6) Sustainability, and 7) Impact of an ECP. Figure 2 is the schematic representation of the emergent categories and sub-categories as a result of the process of analysis. Each category and sub-category will be defined in a narrative form to include direct quotes from the transcribed interviews. The formal coding process did include the additional information

from other data sources, documents or observations obtained during the interview process (Table 4).

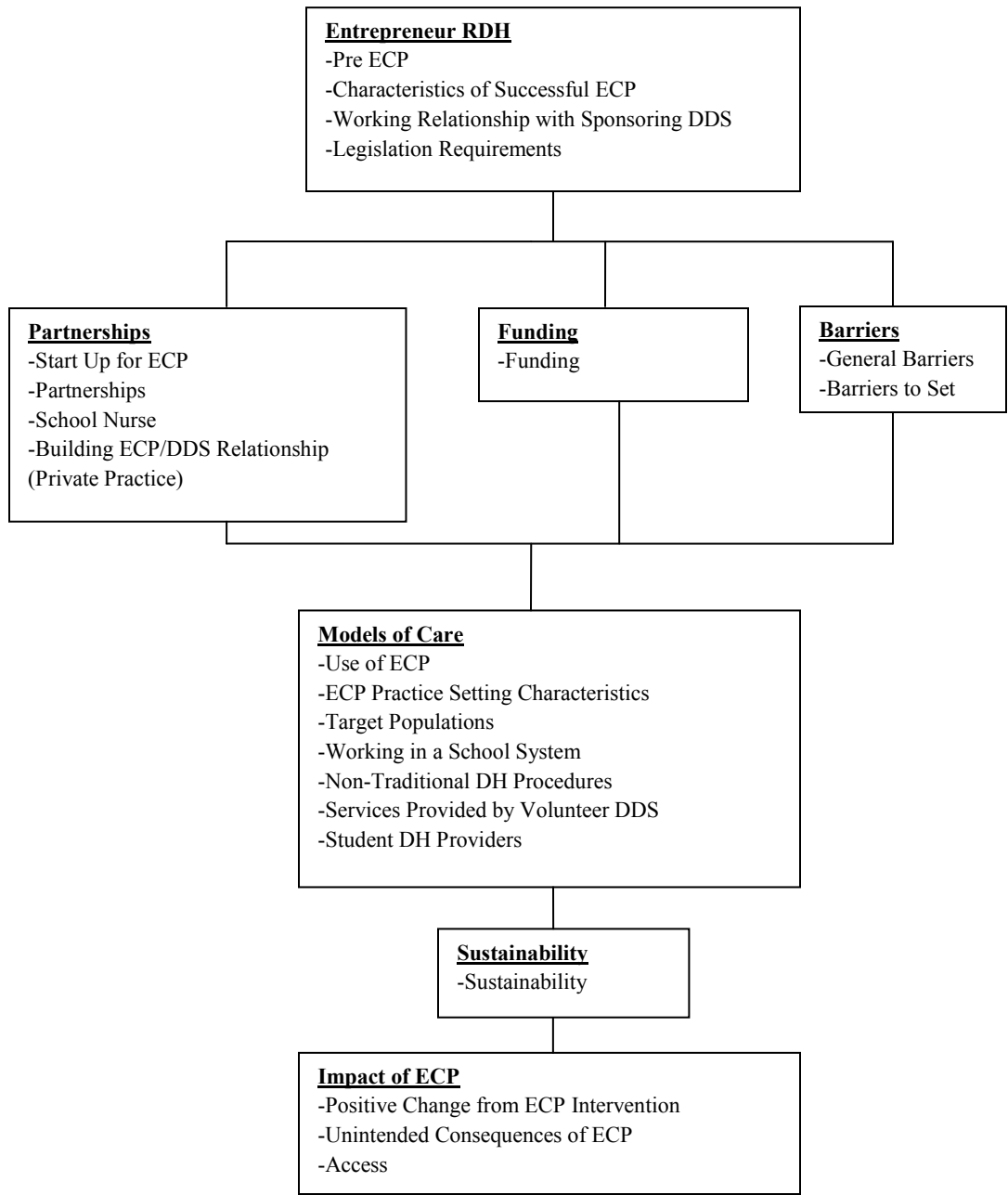


Fig. 2. Diagram of the emergent categories from the Extended Care Permit (ECP) dental hygienist. Results from the data analysis are organized according to categories and sub-categories as represented in the diagram. The ECP is an Entrepreneur RDH that developed a program with partnerships and funding while confronting and overcoming barriers. Sustainability is one critical element to succeeding and continuing the Models of Care. There has been a positive effect from the Impact of the ECP.

TABLE 4

ECP REFLECTION CATEGORY ANALYSIS, BY NUMBER OF TOTAL RESPONSES

CATEGORY	NUMBER
Entrepreneur RDH	97
Partnerships	71
Funding	36
Barriers	25
Models of care	131
Sustainability	22
Impact of ECP	39

Category 1: Entrepreneur RDH

“I believe the ECP who is the leader, whether it’s with a safety net clinic, or on her own, has to have a very rare set of skills as a trailblazer and an entrepreneur, meaning that she has to be very clear about her vision. She has to have a very good skill set to go in and convince people to do something new. She has to be able to sustain her own energy, while still dealing with barriers regularly.”

Results from the data within the emergent category of Entrepreneur RDH yielded 4 main sub-categories: Pre ECP, Characteristics of a Successful ECP, Working Relationships with Sponsoring Dentist, and Legislation Requirements as shown in Figure 2.

Pre ECP

The initial question asked the hygienist about her background in dental hygiene. The eight ECP providers interviewed had an average age of 45 with 18.5 years experience as a dental hygienist. Two hygienists still work in private practice while using their ECP on their “off” days, however five of them work using their ECP on a regular basis outside of the traditional private practice setting. While 5 ECP providers worked in the Northeast area, one worked in South Central, one in the East Central and one in the Northwest region of Kansas. The average of ECP services was about 2.3 days a week in an average of eleven sites. In order to apply for the Extended Care Permit, a hygienist has to meet certain requirements that are included in the Kansas Statutes. Three had the ECP I and five had an ECP II. An ECP I provides preventive services for children and adults that fall under specific qualifications. In addition to the services provided by an ECP I, the ECP II can also provide services for the elderly, homebound or special needs populations. The ECP providers interviewed for this study were some of the most passionate and caring dental professionals in the field as

demonstrated by their reasons for obtaining at Extended Care Permit. Because of their previous experience in private practice, they were motivated to obtain an ECP to provide preventive services for the specific populations that need oral health services, but are unable to receive care due to barriers such as the lack of transportation, no dental insurance, no Medicaid providers in their location, and/or low socioeconomic status. Of the eight ECP's that were interviewed, only one worked specifically with the elderly in nursing homes. The remaining seven worked primarily with children, but also see elderly or special needs patients, in a variety of settings including, safety net clinics, federally qualified health centers (FQHC), head starts, community health centers, mobile vans, and directly in schools (portable equipment).

(ECP) “[...] So I was at [...] in the degree completion program and I wrote a paper [...]. [...]I wrote it because I thought it would be really cool to take dentistry to a school and get it going. And she wrote back to me and she goes, “This paper can come true. Have you been watching the Extended Care Permit?” [...]I went home and said, “I am so ready for a change in my life, and so, this is it. This is what I want to do.”

Characteristics of a Successful ECP

It was clear from the beginning of these interviews that these ECP providers had a special set of characteristics apart from the typical clinical dental hygienist. They all possessed the enthusiasm for helping those in desperate need of oral healthcare which was the major driver for their perseverance toward success. Having worked in private practice settings for most of their professional careers, these ECP providers now had to develop additional skills that would enable them to expand themselves outside the traditional fee-for-service private practice settings. A few of the essential skills sets that emerged in the

interviews included: 1) good communication skills and the ability to network, 2) the ability to conceptualize something that didn't currently exist and develop a plan for bringing it to fruition, 3) the ability to think critically and problem solve, 4) administrative skills were more inclusive and 5) challenges to overcome for a successful outcome. These hygienists were all confident, determined and were quick to confront a challenge and creatively problem solve since they were engaged in a practice setting that to date had never existed in their state. Their passion for their end result of providing services for these underserved populations seemed to be the driving force for the success of their programs.

(ECP) “[...] I had been in private practice for [...] years, and most of that was...well all of that was back in a clinical room working, working with patients. I had very little experience with the [...] administrative part of the dental office, so lots of ...lots of trial and error, lots of learning, lots of tenacity and stubbornness; however you want to call that.”

Working Relationship with the Sponsoring Dentist

In order to apply for an ECP, the dental hygienist must have a written signed agreement with a sponsoring dentist in the state of Kansas. All those interviewed mentioned having a good relationship with their sponsoring dentist. Trust and communication were mentioned throughout the interviews as an essential part of having that initial relationship for the agreement. Some communicate more than others due to the fact that a few ECP providers work more closely with their sponsoring dentist as they are sometimes on the premises of the facility where they are working. A few mentioned that outside their yearly contract signing, they simply provide the necessary reports to their sponsoring dentist and that is the extent of their involvement together. One interviewee mentioned that the public health dentists were more apt to be sponsoring dentists and said “... we also have our best

luck with the, the safety net dentists because they get it. They understand how important it is reaching out to the underserved population”. A few of the ECP providers interviewed for this study still work a few days in private practice and that employer is also their sponsoring dentist. One ECP hygienist had this to say when asked about the relationship with sponsoring dentists:

“It is trust and respect. Different dentists and hygienists have different ways that they define trust and respect. There are a couple of dentists who are so committed to community based hygiene, and community based services that they will underwrite someone that they just happen to know.”

Legislation Requirements

The Extended Care Permit legislation was passed in 2003 and then amended in 2007. The amendment allowed the ECP providers to treat additional underserved populations in more locations/facilities as well as reduced the number of hours of clinical experience required for obtaining an ECP I from 1800 hours to 1200. Once the dental hygienist has received her ECP, he/she is bound to the limitations noted in the statutes. The comments from the ECP dental hygienists interviewed seemed somewhat frustrated by some of the barriers that came from the limited population base that they could see as outlined in the legislation. Although they are allowed to treat those that are underserved and fit the parameters of the statutes, the ECP providers were sometimes confronted by those that were uninsured but had to deny them treatment due to the current ECP legislation. All the interviewees were very aware of the statutory parameters with the patients they were allowed to provide services for and utilize several forms to be sure the communication is clear to those they are treating so they could stay within their treatable population base. Payment to

the these ECP providers is also dictated by the legislation which specifies “... any payment to the dental hygienist for dental hygiene services is received from the sponsoring dentist or the participating organization found in this subsection”. The subject of payment will be discussed under another sub-category later in this paper.

“In 2007, we collectively, dental hygienists, dentists, safety net clinics, the Association for the Medically Underserved, the Bureau of Oral Health and [...] collectively saw ways to expand it. And there was a team of dental hygienists, the Kansas Dental Hygienists’ Association, the Kansas Dental Association, a couple of [Oral Health Kansas] board members, as well as the Director of the Bureau of Oral Health, who expanded the sites where hygienists could serve.”

Category 2: Partnerships

“So you have to partner with the Health Department, with Head Start, or with some other entity, which then also takes a percentage to do that job, rightfully so because they have to employ a staff member to do it. It just makes more sense to me from when I was researching how to go about it and what was the best and what other people have done that it...they can be associated with a Safety Net clinic or something that handles all that”.

One thing all the ECP providers mentioned was the number of partnerships it took to get their programs initiated and make it successful. This category produced 4 sub-categories: Start Up for an ECP, Partnerships, School Nurses, and Building an ECP/Dentist relationship (local private practice).

Start Up for an ECP

The online ECP Toolkit document was created by the consultant working for Oral Health Kansas to assist the ECP dental hygienist with a starting point on how to develop a program. There were some pioneering ECP providers who helped to develop many of the forms (consent, assessment, treatment) that became part of that toolkit and were necessary to

be able to provide services. One interviewee noted “...all those different little details that have to be customized community site by community site whether it’s a long term care facility, or a school, or a Head Start program, or a WIC clinic, or health department...all those different places all have their own procedures, and so they’re going to...you, you just have to tweak yours (forms) in each of those”. Many started with old heavy donated dental equipment that was only portable because it had wheels on it but it was still cumbersome and difficult to transport. Grant application information was part of the toolkit so many took advantage of that by writing their own grants. It sometimes took a few grant applications to get funding for additional equipment and supplies, but the persistence to get their programs started was all they needed to keep moving forward. You will see in the next few sub-categories the necessity for the ECP provider to be a good communicator and networker as there were many areas to forge through just to get a program off and running. One subject had this to say: “...and so the networking skills, the ability to establish relationships, and to be very clear about a business plan, and to set up a business plan, is very important for people”.

Partnerships

All eight of these ECP providers had a group of people that were instrumental in collectively working together to get programs started. A few of the ECP dental hygienists interviewed for this study work within safety net clinics and/or community health centers with the benefit of an incredible system including both staff and administrator support. They worked together as a team creating opportunities to engage more populations to provide preventive services. In some cases, it was essential to develop relationships outside of the

dental community in order to have access to the specific populations for whom the ECP dental hygienist could provide care. A few ECP dental hygienists contacted and built partnerships with directors of nursing homes, school Superintendents, school nurses and Head Start programs in order to initiate the opportunity to develop an oral health program within their facilities. These partnerships are what have given these ECP providers the prospect of delivering preventive oral care to many underserved populations who otherwise may not have received any exposure to oral healthcare services at all. All individuals involved were aware of the need and were willing to work together collectively to make a difference for those in need.

(ECP) “[...] it brought a new awareness to the surveyors, nursing home staff and care givers on what does and does not happen in nursing homes regarding oral health for the residents [...]”

School Nurse

Each of the ECP providers that work in the schools mentioned that the administrators have been instrumental in allowing them into their school programs, but it was the school nurse who assisted with the program and made it a success. An ECP provider had this to say about the benefit of school nurses, “School nurses are the Golden Gate keeper which I’m sure you’ve heard. Generally they have a heart, they want to help the kids, they can be very persuasive and they’re trusted already.” School nurses have direct contact with these school kids and know the issues with the lack of dental care. The importance of the school nurse supporting the idea was detailed by one interviewee who said “that school nurse actually individually called each parent. There were thirty three kids seen on that day. Each parent was called and asked, “Do you mind your child being seen...I am taking them out of class

for this service, Do you want that?” and all thirty three parents said yes.” However, not all school nurses are inclined to have a dental hygienist come into their programs. One hygienist noted the barrier of a school nurse as she mentioned, “Well getting into the schools especially, just getting the schools to allow us to come in. While there were some blocks with the school nurses as they sometimes didn’t want us (coming in). They felt that they were already taken enough time out of class with these kids, because the kids we see are the kids who really need to be in class.” Another issue noted by one interviewee had been that many small rural schools are now without a school nurse due to budget cuts and the receptionist is not only doing her job, but also, in many cases, acting as the school nurse. The ECP provider again works to educate all involved on what is exactly entailed in the program and how the staff and children will be impacted. Together they have worked through any concerns they both have to be sure the kids are the ones that benefit. Some of the biggest frustration for all involved is trying to find a dentist to treat those children with urgent needs. This has been a real dilemma for school nurses and the ECP providers often have the same issues as there may not be a dentist within a 50 mile radius and/or not one available who accepts Medicaid.

(ECP) “[...] Then when we were wanting to really come in and bring portable equipment, then I would find my [...] screening schools that really, really make an effort to get that screening done, and really make an effort of who the urgents (children needing immediate care) are with me, then I went after those nurses to say, “Let me come into your school and clean their teeth, and put fluoride on them and do sealants.” And after that, you know, got them fired up and I actually got into those schools, then they talked it up to other school nurses in Title 1 schools here in town. ”

Building ECP/DDS Relationship (Local Private Practice)

There have been a few challenges with the ECP provider trying to build relationships with local dentists within the areas where they are offering services. These hygienists all try and make an effort to let the local dentist(s) know what their program entails and who they are working with in terms of populations and facilities. While some dentists are supportive, even going as far as to work with the ECP and provide some limited services to patients with urgent care needs often pro bono, others are not. Some ECP providers are focusing on birth to five and trying to prevent early childhood caries (ECC) and have told the local dentist, “what we’re trying to do here is create really good dental patients for you. They’re already going to have that comfort level. [...] they’re going to come in and be that much more cooperative for them (the dentist).”

Category 3: Funding

This category emerged as a unified category that includes start up costs, reimbursement/billing and salaries. All interviewees have different stories regarding their funding with start up costs for equipment and supplies to how they are reimbursed for services as well as how they receive their salaries. All of them applied for and received initial grant money for start up, usually in conjunction with other agencies or groups. It wasn’t easy to get that initial funding as one hygienist noted, “...they kind of gave me the idea and [...] helped me write a grant that we didn’t get and then I sought financial support through other places here in [...] and it just keeps building every year”. An ECP working for a non-profit talked about the initial funding through grant money for start up: “they (the non-profit) had already received \$65,000 from a (funder) to help us with start up. They also

received a \$100,000 from a (funder) to be disbursed over three years once start up actually happened and they had too because everything was donated.” She took on the administrative roll and got the program up and running.

Seven of the nine interviewees are paid by the agency they work with on an hourly basis or salary while two are paid through their sponsoring dentist (Medicaid providers) or other healthcare facility that can bill for Medicaid.

“For many of the hygienists starting out, the reimbursement had come from Medicaid. And it was particularly for children. And so we had to clarify for them, who were potential Medicaid providers. Most of the ECP hygienists were not working for, or had a sponsoring dentist, one who billed for Medicaid. So they ended up working for health departments. For example, Head Start in Kansas can be a Medicaid provider and submit for reimbursement. That is how several of the hygienists working for Head Start and Early Head Start are compensated. And so we had to help them broker that relationship with the health department or with the Head Start and then teach the health department how to bill for Medicaid and how to use the online system for billing Medicaid”.

Another ECP provider mentioned, “ In Missouri, they (public health dental hygienists) have their own NPI’s and when they bill Medicaid, they bill under their NPI. As (ECP) hygienists (in Kansas), we still bill under the doctor’s NPI, or the facilities NPI, ...so that’s something that needs to be changed ultimately, and then (ECP) hygienists can go in with a sponsoring dentist and they can bill it themselves. I mean, I see that as a good way, if they’re really wanting to utilize ECP hygienists they have to do something, in my opinion, to make that process a little bit easier.” The National Provider Identifier (NPI) is a unique identifier for covered healthcare professionals that allows Medicaid reimbursement directly to that provider. Currently, there are 15 states that contain statutory or regulatory language that allow direct reimbursement from Medicaid to hygienists for services rendered (ADHA,

2011). One ECP noted she gets paid less than she would in private practice, but she gets full benefits through a community health center since she is full time with them. Two dental hygienists continue to work in private practice and use their ECP providing services on one to two days a week. One responded, “I’m paid through them (county health department) hourly. It’s a part time position that varies. It can be 10 hours a week or less.” The other part-time ECP gets paid for the Medicaid/HealthWave services rendered which are paid to her through her sponsoring dentist who has a Medicaid number. One ECP hygienist who is working within school systems is billing through a dental school: “ They (the patients they treat) can’t have private insurance, so we don’t have any of that. We do take Medicaid and HealthWave and file it through the dental school.”

An ECP that works for a non-profit states “the alternate way you set that up (in a nursing home) is you have a flat fee...and the nursing home collects that from the family. There are a couple of nursing homes in our area that aren’t so good at paying their bills. So on those particular facilities, we just bill the family the flat fee. Basically it’s just a break even to what the cost is...we’re a non-profit. We’re not out to make money, we want to get the service there, pay our hygienist, pay for supplies, and that’s it. On the schools, we bill Medicaid and if they do not have Medicaid then it’s a \$25 flat fee. That for sealants and cleanings, just \$25 and we’ll do it all and just bill the family. They consent to that. That is on-site. We can’t do exams on-site, or diagnose...that will be just \$25 and that’s to do everything, and basically help defray all our expenses.

Category 4: Barriers

“Umm, the skepticism, is it okay? Is it legal? I love that question, “Well, is it legal?” and dentists don’t think it could be legal,[...] a lot of dentists have really no clue what an ECP is. Umm, that’s been a barrier.”

This category fell into two sub categories: general barriers and barriers to start-up. Most of these barriers have been overcome by the determination of this group of ECP dental

hygienists to move forward with their projects and provide preventive services for the unserved and underserved populations.

General Barriers

A few interviewees noted a general barrier being that of local dentists not supporting their programs when they came to town to work in the school programs or nursing homes. One interview mentioned “[...] I guess my major barrier is the dentist not understanding...with the Extended Care Permit sometimes they find me a threat coming into town and I don’t want to be.” One of the other major barriers to many of the ECP programs is getting these patients that have been provided preventive services to see a dentist for urgent care treatment. Although there have been a few dentists that have been very proactive in treating some of these patients (often pro bono), especially in the larger cities, others have not wanted to be involved in any kind of support. Getting the children restorative care has been mentioned as a major barrier in several ECP programs. The ECP providers continue to make strides in working with local dentists in overcoming some of these barriers to getting care to patients who need restorative treatment on a case by case bases and immediate care for those with urgent needs.

(ECP) [...] and another major barrier through this program has been getting the restorative care completed. I mean that’s like the kingpin of the whole thing. You can treat them with all of the preventative (services)...because we do the sealants, and the radiographs, and the prophys and the fluoride and all that. [...] the year before last we had 11 percent get their restorative done. This past year we had 15 percent.

Barriers to Start Up

Due to this new legislation, the first ECP providers were the pioneers that encountered many barriers to start up. Initially a few of those that wrote grants for their start up efforts were denied funding. Although it was a bit disheartening they were persistent, they rewrote their proposals, reapplied and received grant funding. In many instances this initial funding was used for equipment and supplies to get their programs started.

Developing consent forms was an initial barrier easily corrected by adding the appropriate questions: Is your child eligible for free and reduced lunch? Do you have a medical card? Do you have private insurance? These questions were important to be sure the children were eligible to meet the requirements of the statutes. Some have had limited space within the facility as to where they are set up their equipment. One provider said "...we worked, literally, in a five by five closet with one outlet with all this equipment. I mean it, we didn't have really ideal, you know, accommodations and so that was a major barrier". Another major barrier for two ECP providers has been getting access to start their program in some of the schools. While many school programs have welcomed the ECP providers into their institutions, some schools were reluctant to share information about the children to the ECP which limited the children that could be treated. One school had been unhappy with the services provided by a mobile dental unit that came through Kansas a few years ago and they are now wary about working with any other dental program.

Nursing homes are another entity that has encountered some barriers as well. One interviewee noted, "[...] in 2008, the legislature granted funds for the adults with disabilities, and frail elders on home and community based service waivers to have dental services."

Unfortunately, because of the state budget, the funding was cut so now there are no dental services except for emergency care available for those noted. The legislation is still in place, but no funding. This interviewee mentioned that a couple of ECP providers started to work for nursing homes but it was not sustainable. It took quite some time to develop the service, market the service, writing contracts and agreements. There was a great amount of work with medical histories, nursing home staff cooperation and then there may only be 2-3 patients to see on the day they were there to provide services. Those programs dissolved due to the time it took to get the program up and running and not enough reimbursement to make it a long term venture.

Category 5: Models of Care

“So, as well as it’s another service that they can say, “You need to come here because we have dental that’s being provided. Hygienists are coming and doing cleanings and they’re screening, and if they see any concerns they will help facilitate in getting your elderly loved one to a (dentist)...so basically you’ve got to find out what’s important to that particular facility and sell the points (about ECP) that are on it.”

Within the Models of Care category there were 7 sub-categories that emerged in data analysis: Use of ECP, ECP practice setting, target populations, working within a school system, non-traditional dental hygiene services, services provided by a volunteer dentist and student dental hygiene providers.

Use of ECP

All of those interviewed have successful programs using their ECP. Most of these hygienists have other ECP hygienists that work with them providing clinical services. There are three interviewees that are not doing as much clinical since their main focus is managing the program where additional ECP’s are being utilized. However, they all have an

administrative role of some type which is very typical of an ECP. The ECP dental hygienists interviewed for this study sometimes find themselves a solo entrepreneur, even when working with a health department, and have to manage both positions. One hygienist said, “I have the [...] program that I started and I do it in the schools. I’m the only employee. I have portable equipment, chair, stool and I use a head lamp”. Some providers have created the positions were they are currently working due to their communication, determination, and dedication. When most of these interviewees started, there were no “positions” for ECP providers, per se, so they created their own programs and then marketed themselves to the local community health centers, Head Start programs, nursing homes, and school systems.

ECP Practice Setting Characteristics

ECP practice settings can certainly be different than private practice. When you develop a program, you are often the manager, administrator, clinician and the staff! One may have all the tasks of paperwork to prepare and complete, equipment to maneuver, inventory/order supplies, and offer patient care. Those that become an ECP hygienist know that in their position they may be moving portable equipment from facility to facility in order to offer their clinical services. This equipment can be a challenge especially if you have to move it daily. Having the space to set up can sometimes be an issue within schools and nursing homes. Often times they have minimal spacing for their equipment as one ECP hygienist said, “...you know, a lot of times we would be in a multi-purpose room or something...or the nurses office if it was large enough. Some of the nurse’s offices, I swear, were closets in a former life so there were times that I had my chair sitting in the doorway and then the patient chair was completely filling up the nurse’s office...” Those that work

within a federally qualified health center (FQHC), safety net clinic or community health center usually have a more stable environment much more similar to private practice. One interviewee specifically mentioned how much she enjoyed the autonomy of being an ECP provider at a community health center. She loves having the ability to schedule children for as much time as needed for their treatment time, being able to provide the necessary education and feeling like she is making a difference.

Target Populations

The Kansas statutes dictate the specific populations that the ECP hygienists can treat with preventive oral health services. All but one treats children, whereas four of them also work with the residents in nursing homes and special needs individuals. One program has seen tremendous success: “In the first year we did...I think around 36 kids at one school (pilot program in March)...and then through the next school year we did four schools and we did 400 kids...and the next year we did 521 kids...six schools”. One provider had this to say about working onsite with a special needs patient, “...we’d just seen them in the office, but it was impressive on how much better they did with less medication when we did it on site...I think they respond better in their own setting”. One specifically likes the focus of working with the birth to three year olds and educating their parents to make an impact on reducing Early Childhood Caries (ECC). One noted, “...you know, the kids that need you the most are the kids that aren’t coming into your dental office”. Some of these hygienists also cover several counties to access their targeted populations and do so for both nursing homes and school programs. Again, the message clearly came through these conversations with these hygienists’ that they have a tremendous amount of passion to work with these

targeted populations and literally ‘go out of their way’ to make a difference in improving not only their patients oral health, but also their quality of life.

Working Within a School System

The majority of school boards, superintendents, and school nurses have been extremely proactive in inviting the ECP hygienists to set up their equipment in their facilities and treat eligible children with preventive services. One hygienist sees the kids from kindergarten through twelfth grade and offers screenings, prophylaxis, fluoride varnish and if needed, sealants. She mentioned that having someone at the school willing to help her really makes the program that much more successful. About half of the hygienists said that one major challenge accessing these particular children was getting the consent forms back to allow treatment. Some have found that having all the necessary forms signed in the fall at registration is the most effective and efficient way to have this completed and on file for the school year. Each provider has a unique system that they developed with the nurses and teachers on how they retrieve the children for their appointments to try and keep them out of the classroom as little as possible. One provider has a list of the students that are eligible to be seen and she contacts the classroom and asks the teacher if the child can leave class for the appointment. If the child is testing or cannot leave the room at that time, the teacher will ask the provider to call again later and she then moves down her list. Others go to the classroom and pick the child up from the rooms. Depending on the arrangements with the time the kids take to getting to the chair and what services are given that day, the clinician may see anywhere from 5-16 children.

(Interviewer) “[...] how did you get the schools on board? What...how did you get through to get people on board and what did you do?”

(ECP) “[...]well, we had to talk to the principal and he accepted it right away...he and the school nurse know the need. They see the kids come in with their bombed out teeth and ...oh, nowhere to send them. And so they knew that I could be the guide for screening and trying to help them find (dental) homes, which I have not been successful either in finding...I mean anywhere close. Everyone (dentist), everyone’s an hour away...”

Non-Traditional Dental Hygiene Procedures

There are many additional aspects of the ECP provider position that go above and beyond a typical clinical dental hygienist daily job description. Many of these ECP hygienists do several administrative duties such as the development of initial consent and treatment forms, checking children’s eligibility for Medicaid/HealthWave, hauling heavy equipment/supplies and setting up in less than ideal spaces (poor ergonomic situations), and picking children up from their classrooms for scheduled appointments. There are a few providers that are in management positions within their programs and have additional duties such as writing grants, daily scheduling and administrative paperwork. Some actually spend nearly as much time on paperwork and administrative time as they do providing clinical care; some are paid for all their time, others donate some of their time as part of the commitment to the program. First and foremost, these hygienists all appear to have the passion to want to provide as much oral health care and education as they can to all the children, pregnant women, developmentally disabled and the elderly that they come in contact with at each visit.

(ECP) “[...]and you figure the hours that you’re in doing a school, kids, you’re figuring almost that many hours for the time I go home and fill out all the paperwork for the [...], all my paperwork for the state, because they give us grant money so we have state papers to do besides all the forms we have to send to the parent...beside those kids who really need to be seen right away by (a dentist)...that I have to call the parents and talk with them.”

Services Provided by Volunteer Dentists

As stated earlier, getting children a referral for restorative care has been a challenging process for many of the ECP providers. Some local dentists are not supportive of the ECP hygienist in their communities and will not assist them or their patients. However, it seems that the best source for the children to receive operative care is having the ECP provider connected with a safety net or community health department. A few interviewees mentioned that they have anywhere from 10-15 dentists in the area that volunteer and it seems to work best if the clinic is flexible to the times the dentist is willing to provide services. One clinic has very busy Fridays since many dentists have this day off and volunteer at that time. They adjust time slots to whatever time the dentist is willing to provide. As an example, one volunteer dentist comes in on the first Tuesday evening of every month from 6:00-9:00pm. That is what they want to do so the clinic is happy to accommodate them. There are other volunteer dentists that will actually see the children in their offices. One ECP provider said, “We have a list of about seven...well, we have a list of ten (dentists) that each one has agreed to take one child a month. When there’s five hundred and twenty-one patients and the decay rate’s like eighty-six percent, you end up running out of dentists really fast. [...] has done a ton of pro bono stuff, and he gets, he has done a surgical case for us, and I mean he’s done a ton of stuff. And so he’s on board, and we’re going to start next year busing one day a

month. I'm going to take a bus load of kids to his office...and he's going to treat them all right then and there..."

Student Dental Hygiene Providers

Two ECP providers interviewed mentioned that they are able to have dental hygiene students do a rotation through their programs. The students benefit from being able to work with more children than they might generally see in their school clinics as well as the direct 'public health' atmosphere. This is great opportunity to reach the underserved population with preventive services as well as give the students experience encouraging them to seek employment in underserved areas. The ECP hygienists are the student's evaluators while they are treating patients. This is a win-win for the students as well as the patients.

Category 6: Sustainability

Nursing homes and working with the elderly seem to be a real challenge as far as being sustainable due to the nature of the environment, the bulkiness/weight of the portable equipment, and the frail nature of their patients making it more likely they might fail their appointment. The invested time of the ECP provider to offer services in a nursing home is short lived due to numerous obstacles that keep the program from being sustainable. The time it takes to set up equipment (which is sometimes bulky and heavy) and provide care to only a few patients (in an 8 hour day) does not allow the ECP hygienist to gain much income to make this a long term program. Reimbursement plans vary for elder care, but it is common for the ECP provider to get reimbursed on a per patient basis, so when the chair is empty, he/she is not getting paid. It takes collaboration with the nursing home staff, the residents

and the ECP provider to make it a successful program. All those involved must value the oral health services and understand the importance of providing the care so that it can become a sustainable plan.

“(One) dental hygienist who was invited (to) an Alzheimer’s unit, and a step down unit, and a rehab unit, and huge numbers of apartments, assisted living. So she travelled about forty-five minutes from her home. Picked up the equipment from a safety net clinic, ten minutes over...it took her about twenty minutes to set up the equipment. And sometimes, even though they had eight people scheduled, maybe three would show up. Now that was the job of the social worker and the nursing department. So she had to rely on these people delivering patients to her. And there were probably a number of good reasons why they didn’t show up. So she had to clean up the equipment, take it back, and go home, and she did stop that service”.

One hygienist stated that “its 50 pound equipment...I’m hauling it in and out. I just can’t do it anymore, you know, I’ve got to (do all that) and all the paperwork...if you could get somebody to do the paperwork...take over and help assist and stuff...and sometimes they do send an assistant...”

Two big safety net clinics were mentioned with success stories by one interviewee.

“...In both cases, the agency, the health center employs full time a person who does all the marketing, all the setting up, all the coordination, all the agreements, and makes sure there is a sufficient number of people that the hygienist can serve before they bring them into the...everything from assisted living, to a school to a job care program.” Several ECP providers that started with grant monies are working to develop ways to have their programs made sustainable just from the services they provide whether it be in the safety net clinic, community health centers or through their individual programs with schools in several counties. An ECP working within a safety net clinic said, “...in the bigger cities that have the Safety Net systems, their private insurance patients are generally going to a different dentist. Where we’re at there’s not a dentist to go to. So that is a very key part of being able

to be self sustaining, hopefully without grant dollars...so that we won't need primary clinic money. We won't need to have rely on that." A few interviewees mentioned that they are still unsure of how their programs will be maintained after the initial grant funding for supplies has been utilized. However, they have been able to defeat other complications and they are all looking to find ways to continue to their work using their ECP's and making a difference in these unserved and underserved populations.

Category 7: Impact of the ECP

"There was a resident in one of the facilities we were in and after we, umm...every time this resident would come to the table, she would start to eat and she would become combative. [...] staff couldn't understand and they just kept upping her dose of antipsychotics, upping it and upping it. So then, once we brought the program (oral care education) in and they did the assessments, they found that she had all six of her lower anterior teeth were abscessed. They took her in (to the dentist), took the teeth out, put in a partial and were able to get her completely off antipsychotic drugs."

While reading through the qualitative data, it was evident that the ECP providers were definitely making an impact. Within this category of the "Impact of the ECP" there are 3 sub categories: positive change from ECP intervention, unintended consequences of an ECP, and access to oral healthcare.

Positive Change from ECP Intervention

The ECP dental hygienists that were interviewed had a definite impact with positive change from their intervention. One hygienist provided several occasions where she received positive feedback from children. "We had barely gotten into the room before he (a young boy she had treated before) said, "Look, Look, Look" and he grabbed his lip and he pulled it down and said, "Look, it's pink, it's pink. It doesn't bleed when I'm brushing."

She also mentioned a young junior high school boy that had was a huge Mountain Dew drinker and had several large areas of decay: “we got him hooked up with a (dental) clinic and he was able to get taken care of. But I didn’t think I was really going to get anywhere... The next time I saw him...he said, “I’m not drinking Mountain Dew anymore.” Another respondent mentioned “I do more dental health talks in February, you know, because all the teachers ask “Will you come talk to our class?” I feel that’s fine and something I can do for the community.” Another ECP mentioned that providing sealants has been successful since very few sealants have been placed according to the school screenings.

Success is not only happening with children in the schools, but also for the elderly and special needs patients. Training the nursing home staff to be able to identify oral care issues has had a tremendous positive effect on the residents. This ECP stated that “if a resident stops eating, I would ask the staff what they would look for when a resident stops eating and they would say they’re going to look to see...they’ll probably think about giving them more anti-depressant medicine. Or because they’re you know, they might be depressed, or they might have a stomach ache, but never once did any of them say that they first place they looked was in the mouth. And so now, when a resident stops eating, the first place they look is in the mouth. So awareness is slow, but it’s coming.” Another statement from her cited the impact of the program: “...in the first year of the program...[nursing staff] kept track of hospital (visits).But in the second year of the program,...they did not have one pneumonia case that they sent to the hospital. And the DON (Director of Nursing) thought it was definitely due to the oral care program, improved oral care.” This hygienist also reported that elderly resident facilities that kept up with the senior patients oral care got these

patients referred when they had a problem and they also noticed less weight loss. An ECP working with special needs patients on site mentioned "...it was very impressive on how much better they did with less medication when we did it on site, so I thought that was a very interesting thing to see and perhaps maybe a way to go with dental procedures for some developmentally disabled that wouldn't need, you know if you could just do simple fillings or extractions, I think that they respond better in their own setting. She also stated the cost savings to the facility: "They do not have to transport their patients somewhere. And they do not have to lose one or two CNA's that they need on the floor because they are mandated by federal and state regulations to have so many people on the floor per patient. That's the guideline and that get's checked by stat surveyors, and if they are below that they could get bad dings and that's not good."

Unintended Consequences of an ECP

It was evident in speaking with this group that a few of them had actually carved out a 'niche' due to their ECP. One provider who wanted to work with the birth to three age children was involved in writing a grant for an agency to develop a screening/fluoride program for this targeted age group. Once the grant was approved, she applied and was offered the position of the project manager. Another ECP provider got her start with Head Start and then also developed her own program to work with children in eight counties. Working within the nursing homes and training their staff was a passion for one hygienist. She was able to turn it into a business through grant funding that allowed her to hire ECP's to provide an oral care training program for staff working in 13 nursing homes throughout the state of Kansas. These clinical dental hygienist have not only benefited the populations

they serve with preventive services, but have also had opportunities to use their ECP to advance themselves as programs developers and project managers.

Access

The ECP provider is working with targeted populations that have limited or no access to dental offices or do not have a dental office in the city/town where they reside that take Medicaid or HealthWave insurance for children. The ECP hygienist is also working very well in collaboration with the safety net clinics. One interviewee stated ‘over the past few years, from 2007 to 2010, safety net clinics have been expanded in the state significantly. In 2006, there were five dentists working in safety net clinics, and I think there are thirty seven now (2010). We’ve gone from serving maybe 5,000 patient contacts to maybe 30,000 patient contacts. Most of the dental clinics, the safety net dental clinics dotted throughout the state, and we just opened a couple of new ones and are about to open another new one...they have been the ones hiring hygienists, and they’ve been the ones hiring the Extended Care Permit hygienists.’ These clinics provide a ‘hub’ that the ECP can work from and allows them the mobility of providing care for these populations of children in their school or Head Start program, the elderly in long term care facilities and/or special needs/developmentally disabled in their care homes. ECP providers are making an impact by accessing children, who may not otherwise receive dental care, within schools, providing preventive treatment such as prophylaxis, assessments, sealants and fluoride applications. “the first year we had a talk with the principal and he accepted it right away. He and the school nurse know the need. They see the kids come in with their bombed out teeth and no where to send them. And so they knew that I could be the guide for screening and trying to help find homes...which I

have not been successful in finding...I mean, anywhere close. Everyone's an hour away..." was the fact stated by an ECP provider. Another hygienist noted that "it's a whole community out there so hungry for dental. They have to drive to (...) or (...) or (...), we kind of meet in the middle out there. And so they need to find help in some way." They team with the school advocates to get children with urgent needs referred for further care, however, it is often not possible due to the lack of a Medicaid dental provider in the area. "You know, the kids that need you the most are the kids that aren't coming into your dental office."

CHAPTER 4

DISCUSSION

With the increased awareness of the need for oral health care to unserved and underserved populations on a national level, allowing dental hygienists direct access to those populations that have limited access to dental care is a viable solution to providing preventive dental care. Passing legislation to allow dental hygienists in Kansas to obtain an Extended Care Permit I, entails providing preventive services for children 0-5 and Kindergarten through grade 12 that meet the requirements of Medicaid, HealthWave, eligible for free and reduced lunch, or Indian health services; on any state correctional institution, local health department of indigent care clinic; and on a person, inmate, client or patient of a Federally Qualified Health Center (FQHC) or community health center. An ECP II hygienist may additionally provide care for the developmental disabled and for those persons 65 years and older in long term care facilities (residential and hospital), subsidized housing, state institution, community senior service center, or at the home of a homebound person who qualifies for the federal home and community-based service (HCBS) waiver. Basic preventive services, such as prophylaxis, fluoride application, oral hygiene instruction and assessment for further treatment, are stipulated in the ECP legislation. However, additional preventive services such as sealants and radiographs may be delegated verbally or in writing by the sponsoring dentist as long as it is in consistent with the dental hygiene statutes. The ECP providers very closely resemble the Limited Access Permit (LAP) dental hygienist in Oregon (Battrell et al. 2008). The population base is very similar as well as the practice locations that are established in the legislation.

Currently thirty two states have experienced a trend of amending or modifying state dental practice acts allowing dental hygienists to practice outside the traditional clinical setting to improve the oral health of unserved and underserved populations (ADHA 2011a). These populations are often unable to get care provided by traditional dental settings. The shortage of dentists, the mal-distribution of dental practices and the lack of Medicaid dental providers is just a tip of the iceberg to this lack of care amongst this population. The ECP legislation is relatively new having only been in place since 2003. This study of ECP providers allowed for an in-depth look at those hygienists who, as the pioneers in this arena of care, are blazing the trail as they provide preventive services to specific populations that might otherwise go untreated.

ECP dental hygienists that were participants in this study had a very entrepreneurial spirit. I believe their passion for the working with these specific populations was a major driving force for them to even consider applying for an extended care permit. Written agreements with a sponsoring dentist, development and implementation of their programs and perseverance through obstacles and challenges were well outside the norm of clinical practice, but they were determined to succeed. This kind of determination of the ECP provider parallels the findings in a qualitative study of the limited access permit (LAP) hygienist in Oregon (Battrell et al. 2008). The LAP hygienists in Oregon also had to develop their own systems and strategize how to get their programs started and make them successful.

Initial funding for the ECP's providers programs was provided through grant writing and funding agencies that allowed the hygienists to purchase necessary equipment and supplies to get them headed in the right direction. These hygienists realized that in order to

succeed it would take numerous partnerships to even get their programs in place.

Networking with personnel of: Head Start programs, community health centers, safety net clinics, and nursing homes were initial touch points just to getting their foot in the door to discuss their programs. School nurses were essential contacts for working within the school system to be able to access the large population of children that have unmet dental needs. Next was the development of how they would receive payment for services rendered since they were unable to receive direct reimbursement per the statutes. They all developed payment plans through a facility that already had a Medicaid number (NPI) or through a dentist (sometimes a sponsoring dentist, sometimes not) that was a Medicaid provider and had a National Provider Identifier (NPI) number to be able to process services for reimbursement. Although Kansas does not currently allow ECP hygienists to have an NPI number for direct reimbursement from Medicaid, fifteen states in the U.S do have some form of statutory or legislative language allowing the state Medicaid department to directly reimburse dental hygienists for services rendered (ADHA 2011b). Payment for preventive dental services provided on Medicaid patients allow for access to children, but not on adults. One of the biggest barriers to accessing adults and the elderly are the fact that there is no dental care funding for a majority of this population. Providing preventive dental care in nursing homes on the elderly has been difficult to sustain due to the lack of reimbursement for services. The reimbursement for this population is fee for service collected by the care facility or a fee that is charged to the residents by the residence. The facility then provides payment to the ECP hygienist based on their financial agreement. The frail elderly in nursing homes often have difficulties in making their appointments and therefore the ECP provider

may not have enough patients in a day to sustain the program. Meaning, if only three patients show up in an eight hour day, it is not possible to maintain that program for any length of time due to the hygienist being reimbursed based on per patient basis and not making enough compensation to make it sustainable. The lack of funding and the lack of value of the preventive services may be a significant barrier that will not allow the ECP provider to sustain a successful program for the elderly. One participant had a revelation while being interviewed for this study. She said, “It just occurred to me now I’m used to being a consultant, so that if I charged X amount of dollars to do a day of something...and maybe only 10 people came, I still got X amount of dollars. My job was not to deliver....it comes out of my mouth as I’m talking to someone, that (paying by the day) would be a way to do it.” So in other words, a set fee per day (for specified services) to each ECP hygienist that came into a nursing home would have the facility responsible for getting a patient in the ECP’s chair since the fee would be paid regardless of whether a patient was there or not. This would allow the ECP provider some sustainability to keeping the program ongoing. It would seem that all those involved would benefit from this arrangement since a specified number of patients would have preventive dental care services provided and the ECP would receive a regular consistent salary that would allow her to continue this program.

It is amazing how these ECP hygienists have been able to develop their programs in just about any kind of location often times with portable equipment. They adapt to whatever situation they are given and are flexible to overcome whatever hurdles they encounter. Their target populations are specific and they are very careful to stay within the boundaries of the statutes. School nurses have been very receptive to having the ECP’s in their settings and

have been a great partner to helping to get the oral health care needs met for those children in need. It is evident that the ECP providers experienced many situations of positive change for their intervention. Several of them have enjoyed the opportunity to utilize their time not only for preventive services, but much needed customized education to their patients. They know how to really pinpoint the risk assessments for each individual and customized their care to increase positive results. Their personal drive to make an impact with the populations they are delivering care for was evident during the conversations during this study. The stories that were told during this study had really touched their hearts and keep them motivated to providing care to these targeted populations, even if the reimbursement was minimal. It was the satisfaction of making a difference in someone's oral health and overall health that keeps them sustaining their programs.

CHAPTER 5

CONCLUSIONS

The purpose in this study was to explore the experiences of the Extended Care Permit (ECP) hygienists in Kansas. The results of this qualitative study produced the following results:

1. There are currently one hundred twenty four ECP hygienists registered in the state of Kansas. The ECP providers included in this study often developed a program to include funding for start up, working within specified populations, determining billing systems for treatment rendered and establishing reimbursement for their services.

2. Communication and networking are critical to applying for funding as well as the ability to have access into schools, community health centers, nursing home facilities, and other locations so they can access those in need of preventive care. There would not be any type of dental services in these locations where ECP's are working if they has not engaged in developing these programs themselves.

3. The evidence showed that ECP providers are making a positive impact to those they serve. Those ECP dental hygienists are providing preventive dental care to those individuals who fit the criteria in the specified locations and have a definite impact for improving access to care for the people of Kansas.

LITERATURE CITED

- Allison RA, Bryan D. The declining supply of dental services in Kansas: implications for access and options for reform. A report to the United Methodist Health Ministry Fund KHI/R 05-1. Topeka KS: Kansas Health Institute, 2005.
- American Dental Association (ADA). Health Policy Resources Center. 2004 American Dental Association dental workforce model, 2002-2025. Chicago: American Dental Association, 2004.
- American Dental Association (ADA). Distribution of dentists in the United States by region and state, 2006. Chicago: American Dental Association, 2008.
- American Dental Hygienists' Association (ADHA). Division of Governmental Affairs. Direct Access States. Available at: http://www.adha.org/governmental_affairs/downloads/direct_access.pdf Accessed March 25, 2011a.
- American Dental Hygienists' Association (ADHA). Division of Governmental Affairs. States Which Directly Reimburse Dental Hygienists for Services under the Medicaid Program. Available at: http://www.adha.org/governmental_affairs/downloads/medicaid.pdf. Accessed on May 17, 2011b.
- Battrell AM, Gadbury-Amyot CC, Overman PR. A qualitative study of limited access permit dental hygienists' in Oregon. J Dent Educ 2008;72: 329-43.
- Creswell JW. Qualitative inquiry and research design: choosing among five traditions. Thousand Oaks, CA: Sage, 1998.
- Kansas Dental Board. Kansas dental facts and stats. Available at: <http://www.accesskansas.org/kdb/facts.html> Accessed on March 25, 2011.
- Kansas Dental Board. Kansas Dental Practices Act. Statutes, regulations and related law relating to dentists and dental hygienists. Revised November 2010. [Topeka, KS] Kansas Dental Board, 2010.
- Kansas Dental Project. We have a serious problem in Kansas. Available at: <http://www.kansasdental.com>. Accessed on June 27, 2011.
- Kansas Department of Health and Environment. Bureau of Oral Health. Kansas 2009 Oral Health Workforce Assessment. Topeka, KS: Kansas Department of Health and Environment, 2009.

- Lincoln YS, Guba EG. *Naturalistic Inquiry*. Newberry Park, CA: Sage, 1985.
- Maxwell JA. *Qualitative research design: an interactive approach*. Thousand Oaks, CA: Sage, 1996
- Patton MQ. *Qualitative research & evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage, 2002.
- Rogers E. *Keep Kansas Smiling: Kansas Oral Health Grading Project 2009*: Chicago: Oral Health America, 2009.
- U.S. Department of Health and Human Services (USDHHS), Health Resources and Services Administration. Shortage designation: health professional shortage areas & medically underserved areas/populations. Available at: <http://bhpr.hrsa.gov/shortage/> Accessed on March 25, 2011.
- U.S. Department of Health and Human Services (USDHHS). *Oral health in America: a report of the surgeon general—executive summary*. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
- U. S. Department of Labor (USDOL). Bureau of Labor Statistics. *Occupational Outlook Handbook, 2010-11 Edition. Dentists*. Available at: <http://www.bls.gov/oco/ocos072.htm> Accessed January 11, 2011a.
- U. S. Department of Labor (USDOL). Bureau of Labor Statistics. *Occupational Outlook Handbook, 2010-11 Edition. Dental Hygienists*. Available at: <http://www.bls.gov/oco/ocos097.htm> Accessed January 11, 2011b.

APPENDIX

From: Hughes, Germaine [hughesge@umkc.edu]
Sent: Friday, June 05, 2009 11:11 AM
To: Delinger, Janette
Cc: Anderman, Sheila H.; Amyot, Cindy
Subject: SSIRB Protocol #: 090502 - A Qualitative Study of Extended Care Permit Providers in Kansas
Attachments: Stamped Consents 6 5 09.pdf

Janette Delinger, RDH, BSDH
209 Oakhill St
Lancing , KS 66043

APPROVAL DATE: May 19, 2009

SSIRB PROTOCOL #:090502 - A Qualitative Study of Extended Care Permit Providers in Kansas

Dear Ms. Delinger:

Your study noted above was reviewed and approved with restrictions on May 19, 2009 through the Social Sciences Institutional Review Board's expedited review process. You have met the requirements of the restrictions.

Your study has received approval under Category 6 & 7 of the categories of research that may receive expedited review. You may therefore proceed with your study.

You have full approval of the attached consent forms date stamped 6/5/2009 thru 5/18/2010.

Notwithstanding the SSIRB's approval to conduct the study, in the following situations you must provide timely additional information in order to maintain the SSIRB's approval.

1. The SSIRB cannot approve studies for more than one year. Unless the SSIRB renews its approval, your authority to conduct this study will expire on the anniversary of this letter. To request a continuation of your authority to conduct the study you will need to submit a completed Research Progress Report to the SSIRB office. Your authority to conduct the study cannot be continued until your completed Research Progress Report has received the necessary SSIRB review and approval. Therefore, you need to submit the completed Research Progress Report at least one month prior to the anniversary date of your project's approval/reapproval. The date of this letter is the approval date for your study. However, if your study requires more than one extension, the applicable anniversary date may change from year-to-year. Consult your most recent approval/reapproval letter for the applicable anniversary date. Call the SSIRB office if you have questions about this.
2. If you want to make a change to the study, you must obtain the SSIRB's prior approval of the change.
3. If you want to add or delete investigators from the study, you must obtain the SSIRB's prior approval of the addition or deletion.
4. If a participant in your study is injured in connection with their participation, you must inform the SSIRB regarding this adverse event in a timely way.

Please inform the SSIRB when you complete the study.

If we can be of further assistance, please don't hesitate to call the SSIRB office at 816-235-1764. Best wishes for a successful study.

PLEASE NOTE:

If you are using a signed consent form you must use the copy of the consent form that has been stamped and approved by the SSIRB, which is attached, before you begin consenting subjects. All subjects must be consented on a copy of the approved consent form with the SSIRB Stamp. If requested, a hard copy of the stamped consent can be mailed to you.

Thanks,

Ms. Germaine Hughes
Administrator
Social Sciences Institutional Review Board
University of Missouri - Kansas City
5319 Rockhill Road
Kansas City, MO 64110-2499
Office: 816-235-1764
Fax: 816-235-5602
hughesge@umkc.edu

Appendix B
Consent Forms
Letter of Informed Consent
Extended Care Permit Dental Hygienists

You have been asked to participate in a qualitative research study conducted by Janette Delinger, RDH, BSDH, graduate student at the University of Missouri Kansas City. This qualitative study is designed to explore the practice of the Extended Care Permit dental hygienist as an alternative oral health care delivery system. This study will explore the successful practice of Extended Care Permit dental hygienists in Kansas. The goal of this study is to illuminate the stories of those with firsthand knowledge and experience in extended dental hygiene practice in order to understand the impact of ECP legislation in practice, the impact it has had on increasing the public's access to oral health care services in Kansas and to define the advantages and limitations of this model as a potential solution to access to oral care in the state. There is no direct benefit to the participant.

You have been told that your participation in this observation and interview is completely voluntary and you may end your participation at any time, for any reason, or choose not to participate, without consequences. You can also skip any question you do not wish to answer. The risks involved in your participation are minimal. These include personal views on controversial political issues in dentistry. The researcher will do her best to provide a relaxed interview situation. However, should you feel any emotional concerns or distress, you may contact the Supervisory Committee Chairperson listed on the back of this letter.

By signing this consent you agree to allow the researcher to observe you in a clinical practice setting for approximately one hour in order to understand the nature of the work and responsibilities of limited access permit dental hygienists. You also agree to participate in an individual interview (approximately one hour in duration). The interview topics may include but are not limited to the nature of the work of Extended Care Permit dental hygienists. You agree to allow the researcher to audiotape and later transcribe the interview. You will be asked to provide an email address so that once the data has been transcribed, you will be emailed a copy of your interview asking for your verification providing additional validity to the study. You will be asked to verify the data by a specific date to allow data analysis to begin. One additional reminder email will be sent if there is no response by the deadline date. To protect your privacy, data from the observation and interview will be available only to the researcher and to Cynthia C. Amyot, BSDH, Ed. D., Supervisory Committee Chairperson (contact information below). The researcher may share excerpts of this data, but she will mask your identity by using a pseudonym and by altering or deleting any information that might reveal your identity, or the identities of others that you might mention. While every effort will be made to keep confidential all of the information you complete and share, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research Protections Program, and Federal regulatory agencies may look at records related to this study for quality improvement and regulatory functions. UMKC appreciates the participation of people who help it carry out its function of developing knowledge through research. If you have any questions about the study you are participating in you are encouraged to call the investigator at the contact information on the next page. Although it is not the University's policy to compensate or provide medical treatment for persons who participate in studies, if you think you have been injured as a result of participating

in this study, please call the IRB Administrator of UMKC's Social Sciences Institutional Review Board at 816-235-1764.

Signed: _____

Date: _____

Printed name: _____

Researcher's name and
contact information:

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209 Oakhill St.
Lansing, KS 66043
913-727-6683
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Supervisory Committee Chairperson:

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UMKC SOCIAL SCIENCES
INSTITUTIONAL REVIEW BOARD
INITIALS APPRVD from: 5/20 to: 5/12/16

VITA

NAME:

Janette Erika Delinger

EDUCATION:

5/19/1980	Diploma	Lansing High School Lansing, Kansas
5/19/1983	AS/Dental Hygiene	Wichita State University
5/20/1984	BS/Dental Hygiene	Wichita State University
5/7/2011	MSDH	University of Missouri-Kansas City School of Dentistry

MILITARY SERVICE:

1984-1993	U.S. Army Reserves	Captain
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POSITIONS HELD:

1983-2007	Private Practice	Clinical dental hygienist
2007-Present	Professional Educator	Philips Sonicare

PROFESSIONAL ORGANIZATIONS:

American Dental Hygienists' Association
International Federation of Dental Hygiene
American Dental Education Association
American Academy of Dental Hygiene

HONORS:

Sigma Phi Alpha
Phi Kappa Phi