THE PROVISION OF CHILD DEVELOPMENT KNOWLEDGE TO PARENTS BY THE PRIMARY CARE PROVIDER

By

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KNOWLEDGE TO PARENTS BY THE

PRIMARY CARE PROVIDER

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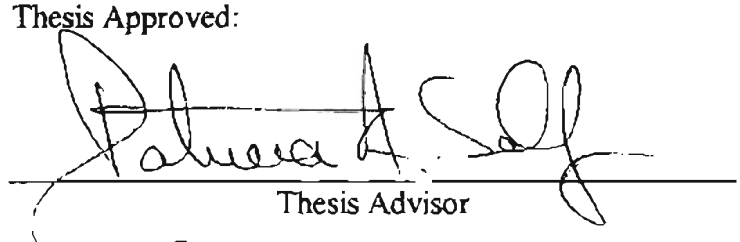

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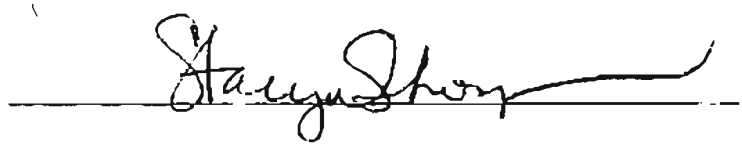

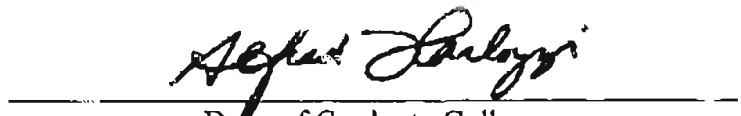

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First I must thank my dear God above for the numerous blessings that have been bestowed upon me. Without his lead, this achievement could not have happened.

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TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

Chapter I

Introduction

Recent early brain development reports based on a decade of research confirm that child development is far more complex than previous notions "nature versus nurture." As this research makes clear, human development is a dynamic and interactive process between genetics and experiences that occurs rapidly from birth to age five but is also lifelong. Early environments, nurturing relationships, human interaction, early experiences, and culture are among the factors that play a critical role in a child's development, (VanLandeghem, Curtis and Abrams, 2002).

Evanstan, Sandler, Brazdziunas, Carl and Gonzalezde Pijem (2001) report that "early identification of children with developmental delays is important in the primary care setting. The pediatrician is the best informed professional with whom many families have contact during the first five years of a child's life." Unfortunately Walton and Edwards (2002) conclude from a national survey that the current structure of nursery training in many residency programs may be insufficient preparation for primary care practices. There are current reports that pediatric residency training programs need regular revision but there is little evidence to support changes. The Future of Pediatric Education II project of American Academy of Pediatrics has renewed interest in how we train residents to practice pediatrics. Walton and Edwards (2002) write that it is essential to look at the experience of trainees and assess how well we are preparing them for future practice. As we strive to use evidence-based medicine as a guide for clinical

management, we should hold these same standards to the evaluation and development of training programs.

Bachner (1995) states that health care reform and consolidation within the health care industry has led to greater interest in measuring the quality of medical care that children receive. Remarkably little is known about measuring the quality of ambulatory services in pediatrics, but nevertheless there is growing interest in "grading" the services provided by health delivery systems. Health care "report cards" are a cornerstone of managed competition. Traditionally, many insurers have reported immunization rates but the suggested set of measures identified in this article include: immunizations, growth parameters, nutritional counseling, anticipatory guidance, behavioral and developmental assessment and screening. The measures identified were developed from the supervision guidelines of the American Academy of Pediatrics. While many recognize the health care system's important role early childhood development, routine child development services are not consistently provided in health care settings (VanLandeghem, Curtis and Abrams, 2002).

Head, Montgomery, Saylor, Bell and Macias (1999) report that professional are often skeptical of the ability of parents, especially those with low education achievement and socioeconomic status, to accurately report their child's development progress. Parents have historically been viewed by professionals to be inaccurate in the reporting of their children's medical history and development. In a shrinking health care economy in which physician developmental evaluation is under-compensated, creative approaches to cost-effective screening and assessment are needed. While there is a cost in parent time to completing a child development inventory, the twenty minutes or so spent with the

instrument may be a good investment in preventing costly over referral or under referral. At the same time it provides a psychologically important opportunity for parents to be meaningful participants in their child's evaluation.

VanLandeghem, Curtis and Abrams (2002) report that approximately 15 to 18% of children in the United States have developmental or behavioral disabilities; however, only 50% of these children are identified as having a problem prior to starting school. Recent national surveys indicate that most parent understand the important role they play in their child's health and development. Many families, however, lack important knowledge and information about how they can best support their child's optimal development.

Parents have many concerns about their children's health and development and they need and want information and support to help their children thrive. Some evidence from recent national surveys indicates that parents are not getting the information they need. (Bethell, Peck, Abrams, Halfon, Sareen and Collins 2002).

Schuster, Duan, Regalado and Klein (2000), report that although pediatricians report that they generally discuss many aspects of anticipatory guidance, few studies have examined what topics are covered and whether parents feel that they have enough information on typical child rearing issues. The third edition of the American Academy of Pediatrics guidelines devotes more space to anticipatory guidance and covers many more topics than the second edition.

The purpose of this study is to examine the health care experiences of metropolitan and rural families in Oklahoma with young children. The first objective is to evaluate if parents perceive that they are receiving increased knowledge on anticipatory guidance

and child development from a Pediatrician verses a Family Practitioner in a metropolitan area compared to those in rural areas. A second objective of the study is to compare any significant differences in parental perception of quality measures of care from metropolitan pediatric care providers and rural pediatric care providers.

A review of existing literature implies that with the growing knowledge and research on early brain development, anticipatory guidance and child development are critical components of the well child visit. There is scant literature on the application and success of pediatric primary care providers implementing the American Academy of Pediatric guidelines within their well child visits. Thus, the current study will examine the parent's perception of needed knowledge received from their primary care provider. The current study will compare any significant differences found in Pediatrician and Family Practitioner practice and between metropolitan and rural health pediatric primary care providers.

Hypothesis

The first hypothesis is that parents utilizing the services of private practice Pediatricians for pediatric primary care will have higher quality scores within each measure of care than parents utilizing private practice Family Practitioners for pediatric primary care. The second hypothesis is that parents utilizing metropolitan care for pediatric primary care will have higher quality scores within each measure of care than parents that utilize rural care for pediatric care.

Definitions of Terms

Well Child Visits is the health supervision visits for young children with recommendations of six in the first year of life, three during the second and then one each year thereafter until twenty-one, Buchnar (1995).

Primary Care Provider is defined as a doctor, a specialist doctor, a pediatrician, a nurse practitioner, a physician assistant, a nurse or any one else you would see for health care, (FACCT 1999).

Anticipatory Guidance is defined as routine parent and child education and counseling regarding feeding and nutrition, sleeping, nurturing, injury prevention, growth, learning, behavior, discipline, communication, language development and toileting, Bethell, Peck and Schor (2001).

Developmental Assessment and Follow-up is the assessment of age-appropriate developmental capability in areas of physical mobility, hearing, seeing, communication, language, learning, cognition, social-emotional development and behavior, Bethell, Peck and Schor (2001).

Chapter II

Literature Review

Theoretical Framework

Bandura (1986) discusses his social-cognitive theory as a theoretical framework for analyzing human motivation, thought and action. The social-cognitive theory view capabilities unique to humans and the socio-cultural context of the individual are magnified even further: 1) The capability to symbolize allows us to process experiences into models that become guides for future action, 2) The capability of forethought, which regulates most of our behavior, allows us to anticipate consequences, set goals and plan, 3) The capability of vicarious learning allows us to acquire behaviors without the inefficiency of trial-and-error learning, 4) The capability of self-regulation allows us to motivate and regulate our behavior, and 5) The capability of self-reflection allows us to analyze our experiences and think about our thought processes.

Bandura (2001) writes that human agency is characterized by a number of core features that operate through phenomenal and functional consciousness. Social cognitive theory distinguishes among three modes of agency: direct personal agency, proxy agency that relies on others to act on one's behest to secure desired outcomes and collective agency exercised through socially coordinative and interdependent effort. The core features of agency enable people to play a part in their self-development, adaptation and self –renewal with changing times. In microanalyses of theory, people set personal and motivate themselves to perform in ways that please or impress others to bring self-satisfaction. In macro-analyses of theory, human functioning is socially interdependent,

richly contextualized and conditionally orchestrated within the dynamics of various societal subsystems and their complex interplay, Bandura (2001).

Willian & Baptiste (1993) write that in the last two decades, the social learning model has expanded "inward," with the emphasis on cognitions and emotions, and "outward," with the inclusion of contexts external to the individual's immediate environment.

The core features of human agency begin with intentionality, a representation of a future course of action to be performed. Intentions center on plans of action. The second core feature is forethought, such as setting goals, the anticipating the likely consequences of prospective actions, and selecting and creating courses of action likely to produce desired outcomes. The third core feature is self-reactiveness, the ability to give shape to appropriate courses of action and to motivate and regulate their execution. A fifth core feature is self-reflectiveness, which is described as people evaluating their motivation, values, and the meaning of their life pursuits, Bandura (2001).

Social-cognitive theory distinguishes among three different modes of human agency: personal, proxy and collective. In direct personal agency is the cognitive, motivational, affective, and choice processes through which is exercised to produce given effects. In many spheres of functioning, people do not have direct control over the social conditions and institutional practices that affect their everyday lives. Under these circumstances, they seek their well-being, security and valued outcomes through the exercise of proxy agency. In this socially mediated mode of agency, people try by one means or another to get those who have access to resources or expertise or who wield influence and power to act at their behest to secure the outcomes they desire. Social cognitive theory extends the conception of human agency to collective agency. People's shared belief in their

collective power to produce desired results is a key ingredient of collective agency, Bandura (2001).

The social-cognitive theory is the framework of choice for the application of the present study. The parent is perceived as the personal agent, making choices on primary care provider's provision of preventative and developmental knowledge. The pediatric care provider is perceived as the proxy agent, a competent and powerful agency, to promote self-development and cultivate personal competencies within the parent. The measures of care outcomes will be the collective agent, quantified by the people's shared beliefs of desired results. Bandura (2001) writes that the capacity to exercise control over the nature and quality of one's life is the essence of humanness.

The review of research is divided by areas of parent perception of care, pediatric knowledge, and metropolitan vs rural care.

Parent Perception of Care

Jalfon, Regalado, McLearn, Kuo and Wright (2003) present that several studies report significant gaps between the current guidelines for child health care, the care that parents report their children are receiving and the services pediatric practices currently offer. In the 1996 Commonwealth Fund Survey of Parents with Young Children, parents reported that pediatric health care providers were meeting their children's physical needs but largely ignoring non-medical concerns. Parents want more information and guidance on topics such as sleep habits, discipline, learning, and toilet training. The 2000 National Survey of Early Childhood Health (NSECH) confirmed that there is room for improvement in preventive and developmental services for young children.

Kaplan (2002) reports that allowing parents to express concerns and effectively screening children's development are essential but time-consuming aspects of primary care. Failure to elicit and address concerns results in substantial dissatisfaction with care and with under-detection of children with delays and disabilities.

Schuster, Duan, Regalado and Klein (2002) conducted a telephone interview of 2017 respondents between July 1995 and January 1996. The objective of the interview was to determine whether parents are receiving anticipatory guidance, whether they could use more information and how receipt of anticipatory guidance relates to satisfaction of care. The variables on the survey included how to care for a newborn; how to deal with sleeping patterns; what to do when your child cries; how to help your child learn; how to discipline your child and how and when to toilet train your child. The survey asked whether respondents would be willing to pay an additional $10 per month to receive the anticipatory guidance discussions and other services. The study concluded that although anticipatory guidance is considered an important component of well-child care, the majority of parents reported that they had not discussed most standard topics with a clinician. Sixty-four percent of respondents would be willing to pay an extra $10 per month to discuss the anticipatory guidance topics listed and to receive other additional information.

Stickler and Simmons (1995) conducted a study on pediatric preferences for anticipatory guidance compared to parental anxieties. It was found that pediatricians in private practice were more likely than those in academic medicine to believe that parents are more worried now than 10 years ago. Most of the pediatricians attributed increased anxieties to the news media or to other parents; fewer attributed the increase to

psychologists or to physicians. Pediatricians were asked to write the topics they felt should be discussed with parents and the top four were ear infections, respiratory allergy, frequent colds and reactions to immunizations. For parents of newborns, the list was headed by discussions of feeding, particularly breast feeding, followed by normal variation of behavior, particularly sleeping and crying; normal development; and preventive health care. For parents of infants up to the age of 1 year, discussion of accident prevention, particularly the use of car seats, was in first place, in addition to the concerns listed earlier. Accident prevention was the most important topic of counseling the parents of toddlers and early school-age children, followed by reviews of appropriate discipline, nutrition, emotional development, and school problems. It is further discussed that the educators of all health providers for children, residency review committees and the various examining boards to be aware of which topics of anticipatory guidance deserve more emphasis in pediatric training programs.

Pediatric Knowledge

Brazelton (1992) writes that in most pediatric training, little attention is paid to child development or to parents' concerns. Those who have such training find that the rewards of making a valuable relationship with parents make pediatrics five times as rewarding. Since, at the present time, few pediatricians get such training, they often feel uncomfortable when parents ask questions about behavior and emotions. Developmentally trained pediatricians can be gold mines for support and anticipatory guidance. Other physicians may be excellent in the physical sphere but may flounder and defend themselves in the area of child development.

Walton and Edwards (2002) write that pediatric residency training programs need regular revision, but there is little evidence to support changes. The recent reduction in time spent in the newborn nursery may negatively affect the care of infants in pediatric practice. A nationwide survey of newborn medical training in residency was conduced for pediatricians in practice two years at the initial mailing. The study had a final response rate of 56%. The majority (67%) of those with one month of newborn nursery training felt it to be insufficient preparation for primary care practice. In contrast, 72% and 75% of those with three and four months of newborn nursery training, felt it to be the right amount. It is essential to look at the experience of trainees and assess how well we are preparing them for future practice. Increased focus should be put on neonatal newborn nursery training, with attention to breastfeeding and common problems, such as anticipatory guidance for the parents. Overall, our preparation of these future pediatricians may be inadequate for the demands of infant care in primary practice.

Bachner (1995) reports there is growing interest in grading the services provided by health delivery systems. What should a report card for pediatric preventive services include? Traditionally, many insurers have reported immunization rates, but little else with respect to children. The supervision guidelines of the American Academy of Pediatrics (AAP) could be part of a pediatric report card. This review of preventive services included: number of well child visits, immunizations, growth parameters, nutritional counseling, anticipatory guidance, behavioral and developmental assessment, and screening. The AAP has made injury prevention a major focus over the past two decades. Pediatrician utilization of AAP information is low. It is found that virtually nothing is as difficult in pediatric practice as the ongoing assessment of behavior and

development. Barriers identified are: no universally accepted screening tool, the definition of typically normal in each of the development areas makes delayed vague, there is much uncertainty about what to do for children who are mildly delayed in a single area of development, and assessments are quite time consuming. This current review was to serve as a starting point for grading pediatric practice.

Hazzard, Dabrow, Celano, McFadden-Farden and Melhado (2000) note that in a 1980 study, it was found that pediatricians spent an average of less than 90 seconds on anticipatory guidance during a routine well-child visit. A study of pediatricians revealed that they responded to less than half of the psychosocial and developmental concerns of mothers during audio taped well-child visits. More recently, it was discovered that opportunities to discuss psychosocial issues arose in 88% of well-child visits with *pediatric or family practice* residents, but the residents responded with information, reassurance, guidance, or a referral only 40% of the time. It is reported that pediatricians believe they lack the qualifications and time to adequately address parents' psychosocial concerns. A pretest The Literacy Development Knowledge Scale, was administered to 66 pediatric residents to assess knowledge about early literacy milestones and appropriate family activities to encourage early literacy development. The intervention group received 30-45 minutes literacy-related training session, access to books for distribution, and several additional training experiences. The greatest impact found, following the posttest, in the final measurements was modeling by a supervising physician in the training activity. It related to significant increases in residents' frequency of literacy-related assessment and anticipatory guidance with families.

Stickler and Simmons (1995) note that because pediatricians seem to have considerable influence on child-rearing, it is important that they address the needs and concerns of families adequately. It is important for the educators of all health providers for children, residency review committees, and the various examining boards to be aware of which topics of anticipatory guidance deserve more emphasis in pediatric training programs.

Young, Davis, Schoen and Parker (1998) write that the importance of child-behavior and parenting concerns within pediatric practice has increased with the decline in morbidity and mortality from childhood infectious diseases and the rapid pace of social changes affecting family life. In 1958, a pediatrician reported those parents' developmental concerns about their children accounted for less than 2% of his practice time. By the mid 1960's, reports from individual primary care practices found that 45% of mothers were more concerned about their children's development and behavior than all other issues. A majority of parents reported using multiple sources for information on child development and child-rearing practices. Even so, many parents desire expert guidance and information on a wide range of non-medical child-rearing topics.

Scientific research emphasizes the rapid brain development in children younger than three years, and that everyday parental activities such as reading and affection are important influences in a child's healthy cognitive and psychological development. Young, Davis, Schoen, and Parker (1998) found that most parents view the pediatric health care system as meeting the physical health needs of their young children. Parents want more information and support on child-rearing concerns, yet pediatric clinicians often fail to discuss non-medical questions with them. The interventions of pediatric

clinicians can positively affect parental behavior. Their findings also reveal that parents who speak with their physician or nurse about encouraging their child to learn are more likely to read to their child on a daily basis, compared with parents who do not discuss learning with their child's physician (47% vs. 37%). FACTS (2003) report data as follows: Total number of office visits in the United States, in the year 2000, to select specialties by age of client and principal reason for visit were: Pediatrician total visits for children under 3 years of age were 45,371 with 10,219 being well child examination, while General Family Practice total visits under 3 years of age were 8,485 with 2,199 being well child exam; percentage of preventive and therapeutic service provided in growth and development counseling by specialties were Pediatrician 15.5% and General Family Practice 1.8%. Family practitioners in 2001 identified high priority needs under infant, child & adolescent as emotional development/behavior/discipline 25.4% and normal growth & development/well childcare 25.8%. A total of 238,987 physicians in 1999 attended continuing medical education courses approved by the American Academy of Family Physicians, with 6,060 of physicians attending a pediatric course.

Regalado and Halfon (2001) examined the evidence base for primary health care services promoting the optimal development of typically developing children aged birth to 3 years. Services such as developmental assessment and anticipatory guidance about developmental concerns have historically been bundled together with, and are indistinguishable from, other primary pediatric and preventive services. A list of developmental services for children during the first three years of life was created based on a review of recommendations detailed in health supervision guidelines of the American Academy of Pediatrics and the Bright Futures Project. Categories defined

were: assessment activities, education services, intervention activities and care coordination. In many instances the authors found studies to examine. Two of the studies addressed physicians' effectiveness at identifying developmental problems, both suggesting that relatively few are identified before school entry and that only severe clinically apparent disabilities are most likely to be identified early by physicians. Under developmental education it was found that several important issues are relevant to promoting optimal development in clinical practice, i.e., what is largely considered anticipatory guidance. Studies demonstrated that physicians' teaching efforts could be effective in promoting healthy development. A number of barriers are identified to the effective provision of these services, including training and expertise, adequate reimbursement, and availability of appropriate referral services to address discovered needs. A critical focus in training then must be a definition of competencies in developmental and behavioral pediatrics.

As the literature notes there are many identified concerns beginning with the training and education of pediatricians and general family practitioners with a weakness in child development and anticipatory guidance. Other barriers in the delivery of well-child services were a standard tool. Research has been conducted on effective tools and cost-effective methods of screening children and addressing parental concerns. Forrest, Shipman, Dougherty and Miller (2003) found the development of measurement tools that obtain the perspectives of children or parents on child health is one of the best concrete examples of the recent progress in pediatric outcomes research. The number of recommendations for preventive care has proliferated in recent years. Child health

practitioners need guidance regarding the ones to which they should devote their energy and limited time.

Kaplan (2002) reports that research shows that it takes more than 12 minutes for patients to list their symptoms and concerns and that if patients were interrupted, their concerns tended to erupt at inconvenient times. Research also shows, that only 50% of parents understand the word "development." In this study, group A served as the control group with no type of intervention administered. Group B were parents who were allowed to address their issues by using the Parents' Evaluation of Developmental Status (PEDS), a brief measure that elicits psychosocial concerns while waiting for their visit. In conclusion, Group B parents allowed to express concerns decreased providers time and improved satisfaction in patient flow.

Metropolitan-VS-Rural Primary Care

Kaplan-Sanoff, Lerner and Bernard (2000) states that the pediatrician is the person parent's turn to most for guidance on their child's development. Yet it has been reported that in 60% of all routine well child visits, the physician ignored parental concerns or provided no developmental or behavioral information or guidance. Two new innovative programs placed developmental specialists in pediatric offices to be the primary child development and family support resource for families, bringing to the practice an expertise in child and family development. Unfortunately, insurance companies and HMOs are not willing to provide reimbursement. Until parents demand the needed service this path may not be implemented.

Metropolitan Well Child Care

Broffman (1995) reports that 37% of the children that live in large metropolitan areas are cared for by 57% of the practicing pediatricians, with the remaining by a family physician or allied health professional. In 1989, only 7.8% (2700) of the 34,495 pediatricians in the United States were practicing in non-metropolitan areas. The American Academy of Family Physicians (2003) reports of physicians and selected specialties providing preventive & therapeutic services on growth and development counseling, general family practitioners provided 3,515 visits and pediatricians provided 16,089. Research indicates that the largest majority of pediatricians practice in metropolitan areas and provide more preventive and therapeutic information on growth and development than family practitioners.

Rural Well Child Care

Most of the literature reviewed at this time has addressed the assessment of children within the primary care provider setting defined as the pediatrician. Broffman (1995) addresses the special challenges to the delivery of general primary care pediatrics in rural America. Of all the primary care physicians, pediatricians represent the smallest number of specialists located in non-metropolitan areas. Only 11% of pediatricians practice in rural communities to care for the 29% of the childhood-age population that inhabit those communities. The remaining childhood-age population's care in rural communities is covered by a family physician or allied health professional such as a physician's assistant or a nurse practitioner. In 1988, 63.5% of non-metropolitan counties were without general pediatricians. A constant source of frustration to the rural physicians, a never-ending need to battle a perception on the part of urban colleagues and much of the public

that rural care equates with poorer-quality health care compared with metropolitan care. The prejudice that family physicians are poorly trained to care for children needs to fade but the fact remains that family physicians need to recognize when to seek consultation from a pediatrician.

Hirschfeld (1995) reports that most small rural communities have no hospital, many have no daily clinic, and some have no close medical care provider at any time. Education is the area in which all primary care providers can contribute, including patient education on prevention and anticipatory guidance. Rural areas that have no Pediatrician's need outreach. In summary, rural providers, whether pediatrician, emergency physician, or family practitioner, can participate in many valuable ways to decrease the morbidity and mortality of childhood illness and injury. One suggestion is *that as a medical home for children*, rural providers can furnish immunizations, anticipatory guidance with prevention instruction and handouts.

Schuster, Duan, Regalado & Klein (2000) state that clinicians who take care of children have a professional responsibility to provide anticipatory guidance to parents. Anticipatory guidance may be more important than ever. Both improved training and standardized medical record forms, which prompt physicians on age-appropriate advice, might help. The time is right to begin re-conceptualizing how the needs of young children and their families may be met. With the expansion of managed care, there is both the opportunity and the challenge to creatively reconfigure the current model of pediatric practice. Competition and financial pressures will require pediatricians to work with other and other non-physician specialists such as nurses, early childhood educators, and psychologists in expanded roles of delivering pediatric care.

SUMMARY

The literature review included existing information on guidelines of well child visits and supervision of child development and anticipatory guidance, current pediatric training and knowledge on child development and anticipatory guidance, and current knowledge of utilization of guidelines within the well child visit. The review also addressed known differences and challenges between well childcare in the metropolitan area and the rural area, and the number of pediatric specialist offered in rural care. Chapter three discusses the current research study and design.

Chapter III

Methodology

Research Design

The present study is comparative; and the data are provided by parents of young children between the age of ten months and forty-eight months. Consideration to prior literature concerning pediatric well-child visits, pediatric primary care providers training and knowledge, and location of pediatric services provided led to the conceptual hypotheses in the current study.

Sample

The sample consisted of 150 parents between the age of nineteen years and forty years of age. The parent was a participant in the Women, Infants and Children program (WIC), had a child between 10 months and 48 months of age and was not a participant in the Children First Program offered through the county health department. Fifty parents at each of the metropolitan county health departments and a total of fifty parents between the two rural county health departments were asked to participate. The parent filled out a questionnaire during their routine monthly WIC appointment. The designated county health departments were Clinton, OK and Weatherford, OK (Custer County) and El Reno, OK and Yukon, OK (Canadian County). Custer County is considered rural health care and Canadian County is considered metropolitan health care. There are four to five practicing pediatricians in Canadian County, all located in Yukon. There is one practicing pediatrician in Custer County and is located in Clinton.

Participants were asked to complete a questionnaire that would examine their experiences of care for their child. A designated clerk at each site was available to read the survey for participant as needed. The surveys were numbered one through fifty at each county site and coded for location and county. There was no identifying criteria that could link participant and survey.

Data Collection

The administrator for Canadian and Custer County was contacted concerning permission for survey administration and data collection. The Director of WIC at the Oklahoma State Department of Health was also contacted concerning permission to recruit current WIC client's for the study. Approval was required from the Oklahoma State Department of Health and OSU IRB committee prior to data collection. A script was developed from the protocol for the assigned clerk to explain the purpose of the study, the survey itself and any benefits to be attained with the data collected. Clerks of equivalent positions were assigned and in-serviced on survey administration at each county health department. A consent form was developed with required data and signature citing voluntary participation (Appendix A). The survey (Appendix B) was completed by participants and returned to the investigator during a nutritional educational update WIC visit at the county health department.

The amount of time to complete a survey was approximately one hour and fifteen minutes. More time had to be allowed for clients unable to read the survey themselves or requiring the utilization of an interpreter. Data collection time needed was estimated at two to four weeks but actual required time for collection was six to eight weeks. The average age of the child surveyed in the metropolitan area was 26 months. The average age of the child surveyed in the rural area was 24 months.

Of the original fifty collected in Yukon, forty-four met the criteria for the study and a total of forty from El Reno met the criteria. In the rural counties of Weatherford and Clinton, forty-seven qualified for the study. The principal investigator returned to the county health departments to provide additional surveys to complete the study. Additional surveys were administered to participants at each site as needed. This completed the survey data collection with no need for follow-up.

Instrument

The participants completed The Promoting Healthy Development Survey (PHDS) for evaluating the health care experiences of families with young children. The survey contains forty-four questions and evaluates seven measures of care including: 1) needed anticipatory guidance and parental education from doctor or other health care provider; 2) health information; 3) follow-up for children with an indication of risk; 4) assessment of well-being of parent; 5) assessment of smoking and drug use within the family; 6) family centered care and helpfulness; and 7) effect of care provided. For the purpose of the current study, two measures of care will be omitted from the study including: assessment of well-being of parent and assessment of smoking and drug use within the family. The two questions were omitted since the present study focused on the measuring the well being of the child and not the being of the parent. The survey tool was developed through the Foundation of Accountability (FACCT) and has been utilized at the national, state and local level as a measurement for health care quality. The psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity (mean factor loading: 0.69) and internal consistency (Cronbach's 0.80), (Bethell, Peck and Schor 2001). The responses on the survey were scored with mean scores derived for each of the

five measures of care for each parent. For each parent the measure of care score was summed and then divided by the number of items in the measure. For example on Family Centered Care, a total of nine questions were answered by the parent to calculate one mean score in this measure of care. Once parent measure of care scores were calculated, then measures of care for groups of parents were computed. For each parent measured, the measure of care score was equal to the sum of each respondent's quality score divided by the number of items with a quality score.

Chapter IV

Results

The current study examined the parent's perceptions of the quality of care provided by their pediatric primary care provider. The study was done to determine if a difference in perception of patient's exists (1) if the care is metropolitan or rural care and (2) if care is provided by a pediatrician versus family practitioner. For the metropolitan analyses 100 parents were utilized: for the metropolitan vs rural analyses, a random sample of 50 metropolitan parents were utilized and 50 rural parents were utilized.

Descriptive Data

Each measure of care questions was coded numerically. For questions that required a yes or no answer, yes equaled 100 points, no was scored as 0 points. For questions with four possible answers from Never to Always, answers were scored as 0, 33, 67 or 100 points. Each individual parent received one score for each of the 5 measures used in this study. Table I provides the overall means for the tests of hypotheses. Table II shows the means for the additional analyses.

Tests of Hypotheses

In order to examine mean differences between metropolitan and rural care and type of physician, t-tests were performed. Table III shows the results of the t-tests for metropolitan versus rural care; Table IV shows the results for Pediatricians versus Family Practitioners.

Table III

Difference In Parent Perceptions of Quality Provided By Metropolitan vs Rural Care

Metro vs. Rural:	Metro. / Rural Mean / Mean	t value (df)	Probability
Anticipatory Guidance	45.64 / 48.28	-0.38 (96)	0.7024
Health Information	70.00 / 87.29	-2.57 (74)	0.0123*
Assessment & Follow-up	15.83 / 26.06	-1.81 (93)	0.0741
Family Centered Care	50.32 / 59.41	-1.70 (96)	0.0919
Effect of Care	68.05 / 69.77	-0.32 (89.1)	0.7475

* $p \leq .05$

As Table III shows, a significant difference was found in the perception of the quality of health information provided in metropolitan centers versus rural centers. The rural mean was found to be higher than the metropolitan mean. No other significant differences were found between metropolitan and rural primary care. Given these findings, Hypothesis I was not supported.

Tests of Hypotheses

In order to examine mean differences between metropolitan and rural care and type of physician, t-tests were performed. Table III shows the results of the t-tests for metropolitan versus rural care; Table IV shows the results for Pediatricians versus Family Practitioners.

Table III

Difference In Parent Perceptions of Quality Provided By Metropolitan vs Rural Care

Metro vs. Rural:	Metro. / Rural Mean / Mean	t value (df)	Probability
Anticipatory Guidance	45.64 / 48.28	-0.38 (96)	0.7024
Health Information	70.00 / 87.29	-2.57 (74)	0.0123*
Assessment & Follow-up	15.83 / 26.06	-1.81 (93)	0.0741
Family Centered Care	50.32 / 59.41	-1.70 (96)	0.0919
Effect of Care	68.05 / 69.77	-0.32 (89.1)	0.7475

* $p \leq .05$

As Table III shows, a significant difference was found in the perception of the quality of health information provided in metropolitan centers versus rural centers. The rural mean was found to be higher than the metropolitan mean. No other significant differences were found between metropolitan and rural primary care. Given these findings, Hypothesis I was not supported.

Table IV

Difference In Parent Perceptions of Quality Provided By Type of Doctor

Pediatrician vs. Family Practitioner	Ped. / Family Pract. Mean Mean	t value (df)	Probability
Anticipatory Guidance	68.97 / 38.34	-4.33 (86)	.0001*
Health Information	42.00 / 46.00	-1.98 (86)	0.0504*
Assessment & Follow-up	23.26 / 19.56	-0.72 (86)	0.4734
Family Centered Care	60.91 / 52.99	-1.40 (86)	0.1659
Effect of Care	75.26 / 73.15	-0.38 (88)	0.7019

* $p \geq .05$

As Table IV shows, a significant difference was found in perception of the quality in anticipatory guidance and the quality of health care provided by the physician. In both instances pediatrician means were higher than family practitioner. No other significant differences were found between pediatrician and family practitioner care. Based on the two significant findings and the direction of the non-significant finding, the second Hypothesis received support. This Hypothesis was that there would be difference in parent perceptions of quality provided by type of doctor.

Additional Analyses

Additional analyses were performed in order to examine differences by both area of care and type of physician; an analysis of variance was completed for each measure. The results of these analyses are shown in Table V. Since the physician was nested within the area of care, a nested model was used.

Table V

Analysis of Variance Results By Nested Type

Question	N	Model F F	Model F Prob.	Metro. Vs. Rural F	Metro. Vs. Rural Prob.	Type of Doctor F	Type of Doctor Prob.
Anticipatory Guidance	130	7.79	.0001*	2.03	0.1545	10.67	.0001*
Health Information	128	2.47	0.0654	2.16	0.1439	2.61	0.0774
Assessment & Follow-up	127	3.38	0.0206*	0.77	0.3828	4.82	0.0096*
Family Centered Care	130	2.28	0.0830	0.22	0.6386	3.33	0.0389*
Effect of Care	130	0.85	0.4694	1.72	0.1916	0.34	0.7135

*$p \geq .05$

As Table V shows for the overall nested model there is a significant F in both the perception of quality of anticipatory guidance and the quality of assessment and follow-up. As the results from the analysis of variance indicate, the type of physician was significant in three of the quality of care questions. The perceived quality of anticipatory guidance, the provision of assessment and follow-up care, and the amount of family centered care was significantly greater when provided by a pediatrician in this sample of parents. In the questions about the amount of anticipatory guidance as well as assessment and follow-up care, the overall model was also significant. Post-hoc tests for significant differences revealed that pediatrician care in rural areas had higher mean ratings of care than those in metropolitan areas, whereas family practitioner care in metropolitan areas had higher mean ratings of care than those in rural areas.

Summary

This chapter presented the results of mean descriptive data, t-test hypothesis data, and analysis of variance data using a nested model to examine differences. The first hypothesis stated that parents utilizing the services of private practice Pediatricians for pediatric primary care will have higher quality scores within each measure of care than parents utilizing private practice Family Practitioners for pediatric primary care did not receive support. The second hypothesis stated that parents utilizing metropolitan care for pediatric primary care will have higher quality scores within each measure of care than parents that utilize rural care for pediatric care received some support. Chapter Five discusses the study's results and provides implications for further research.

Chapter V

Discussion and Implications

The current study was conducted to examine differences in parent's perceptions of quality of care provided to their young children by their primary care provider. There were two independent variables for analysis of quality of care examined: (1) Location of care, metropolitan vs. rural, and (2) Type of doctor, Pediatrician vs. Family Practitioner.

The results gave no support for hypothesis 1 and some support for hypothesis 2. The following sections present and discuss the findings in greater detail.

Hypothesis I Overview of Findings

The first hypothesis examined whether the parents perceptions of care receiving services in metropolitan areas for primary care would have higher than those receiving care in rural areas. This hypothesis was not supported by the t-tests for any of the five measures. The only significant difference was found in the quality of the provision of health information. This finding was opposite from what was hypothesized, since the mean for rural care was significantly higher than the mean for the metropolitan area. Within the analysis of variance results of nested interactions, all five quality measures were found to be non significant when the means were separated out for location of care. Parents utilizing metropolitan pediatric care did not perceive higher quality care than parent's utilizing rural pediatric care.

Hypothesis II Overview of Findings

For the second hypothesis, it was postulated that the perception of parents receiving care provided by a pediatrician would rate the quality of the care higher than when it was given by a family care practitioner. In the overall mean comparisons (Table 4) the means are significantly higher for pediatrician care than the means for family practice care. The analysis indicates (Table 2) that quality of care mean scores are higher in all five measures of care for pediatrician's in both metropolitan and rural locations. The t-test analysis (Table 4) indicated a significant difference in the perceptions of the quality of anticipatory guidance and the quality of health information given.

An additional analysis included a nested model to test for interactions. It indicated significant differences for parent perceptions of quality provided in anticipatory guidance and the quality provided in assessment and follow-up of care. When the effects were separated out, significant differences were found for physician type in parent perceptions of quality provided within anticipatory guidance, assessment and follow-up of care, and family centered care for pediatricians especially in rural areas.

The study indicates that the perception of quality of care is much more significant by type of physician providing the care than the location of care provided. The pediatrician's quality scores are much higher throughout the study. VanLandeghem, Curtis, and Abrams (2002) report that when ask about child development assessment, most pediatricians (93 percent) agree that pediatricians should inquire about child development during health supervision; however, few (36 percent) think that their time is sufficient for developmental assessments and still others (65 percent) report having inadequate training in assessment.

Implications for Practice and Future Research

The results from this study indicate that parents perceive a higher quality of care from a pediatrician regardless of where the care is provided. It is important to note that few pediatricians are available in rural communities, but provide a significant amount of the care in those areas, according to Broffman (1995) who reports that only 11 percent of pediatricians practice in rural communities to care for the 29 percent of childhood-age population that inhabit those communities. This study supports the increased availability of specifically trained primary care providers even in rural communities.

This study utilized data from a concentrated area in two western Oklahoma counties. Due to the restriction of time, location and sample size, the findings may not generalize to other locations. Therefore, future studies should examine counties in various parts of the state, a larger sample size.

Future research might also include the examination of actual primary care services provided within a Pediatrician well child visit and a Family Practitioner well child visit. Research indicates that a Pediatrician actually receives more training in pediatric health and child development than a Family Practitioner. The AAP has guidelines for pediatric practice to include all aspects of health, including anticipatory guidance and child development. Do pediatrician's offer anticipatory guidance and prevention information to parent's more often in a well child visit than a family practitioner? What makes specific practices different that result in higher perceptions of quality by parents of young children and what are the long-term affects of quality primary care? An observational research study could correlate the parent's perception of quality in well-

child visits provided by the primary care provider to what is actually done during the visit.

A longitudinal study could correlate parent's perception of quality in well-child visits provided by the primary care provider to the pre-kindergarten achievement tests. Although many studies have been conducted on type of child-care utilized and school readiness, there are few studies found on the type of primary care available and school readiness. When the primary care provider offers age appropriate anticipatory guidance to the parent on child development, optimal childcare, learning tools, safety, and injury prevention could it have a positive relationship to school readiness scores?

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APPENDIXES

APPENDIX A

PROMOTING HEALTHY DEVELOPMENT SURVEY

SCRIPT:

You are being asked to take part in this study because you are the parent of a child between the age of 10 and 48 months.

The purpose of this study is to examine health care experiences of families with young children. We will not include clients in the Children First Program due to the large amount of teaching on child development, prevention and safety. We are asking parents between 19 to 40 years of age to answer the survey questions.

You will be ask to answer 43 questions that include questions on what parent education and child health information has been given to you by a doctor or other health care provider. It will take about 10 minutes to complete.

The health care provider could be a Dr., a nurse practitioner, a physician assistant, or a nurse.

A Few Important Things For You To Know:

*There is no harm in taking part in the study.
*There is no information linking you to the survey form.
*Your services at the health department will not change by taking part or not taking part in the study.
*There are no direct benefits to you in the study, but the information from this study will be used to improve communication between other parents of young children and their healthcare providers.

It is your choice in taking part in the study. Please take your time in making up your mind.

Thank you.

APPENDIX B

CONSENT FORM

Oklahoma State University
Oklahoma State Department of Health
Canadian and Custer County Health Departments

The Provision of Child Development Knowledge to Parents by the Primary Care Provider

Diedre Chambers, RN
OSU Graduate Student

This is a research study. Research studies involve only individuals who choose to participate. Please take your time to make your decision.

You are being asked to take part in this study because you are the parent of a child between the age of 10 and 48 months.

The purpose of this study is to examine health care experiences of families with young children.

You will be asked to complete a 43 item parent survey that includes questions on what anticipatory guidance, parent education, and child health information has been provided to you by a doctor or other health care provider. An example would be, "In the last 12 months, did your child's doctors or other health providers talk with you about your child's growth and development?" The survey will take you approximately ten minutes to take. Your participation in the study will be completed when you return the survey to the primary investigator or nutritionist.

There is nothing on the survey that will identify you and your participation or non-participation will in no way affect your services at the health department.

There are no risks identified in the study.

If you agree to participate in the study, there are no direct benefits to you, but the information from this study will be used to improve communication between other parents of young children and their healthcare providers. It is important to communicate our needs to providers who provide these important health care services for our children.

You may also choose not to participate in the study. If there are individual questions you do not feel comfortable responding to, you may leave that question blank.

You will not be identifiable by name, number, or description in the study. There isn't identifying criteria obtained for the study so strict confidentiality is maintained.

There are no costs to you for participation in the study.

No funds have been set aside by the OSDH to compensate you in the event of injury.

Taking part in this study is voluntary. You may choose not to take part or may choose not to complete the survey at any time. If you agree to take part and then decide against it, you can withdraw for any reason. Leaving the study will not result in any penalty or loss of benefits that you would otherwise receive.

If you have questions about the study, contact the principal investigator, Diedre Chambers, at 405-271-7612or at night 405-663-2075.

For questions about your rights as a research subject, contact:
Shari Kinney, OSDH IRB Coordinator at 405-271-6617 or
Ms. Sharon Bacher, OSU IRB Office at 405-744-5700.

By signing this form, you are agreeing to participate in this research study under the conditions described. You have not given up any of your legal rights or released any individual or institution from liability for negligence. You have been given an opportunity to ask questions. You will be given a copy of this consent document.

I agree to participate in this study:

Research Subject:_____ Date: _____

Witness _____ Date: _____

Person Obtaining Informed Consent:_____ Date: _____

Principal Investigator:_____ Date: _____

APPENDIX C

FACCT

FOUNDATION FOR ACCOUNTABILITY

CAHMI

The Child and Adolescent Health Measurement Initiative

The Promoting Healthy Development Survey (English)

Author: FACCT

FACCT—The Foundation for Accountability

Your Voice Counts 2.0

A Survey About the Health Care Experiences of Families with Young Children

Instructions

1. In this survey, the word child is used to refer to the child or foster child named in the letter that came with this survey. Answer all the questions in the survey for only that child.

2. Please have the parent or guardian who is the most involved with your child's medical care fill out this survey.

3. Answer ALL the questions by checking the box like this.

   ☐ Yes ☑ No

4. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow and then a note that tells you what question to answer next, like this:

   ☐ Yes ↓ ☐ No →

   (Go to page 8 and continue with question 12)

   So, if you choose to answer "No" to this question, you first put a **check** in the box and then you will **go to page 8** of this survey and continue the survey with question #12.

Before you begin, please answer this question:

Do you have a child that is between the ages of 1 month and 50 months old?

☐ **Yes → (Go to page 2 and continue with question 1)**

☐ **No → (Please STOP NOW and RETURN this survey)**

Thank you for your help with this survey on health care experiences of families with young children!

YOUR VOICE COUNTS!

CONFIDENTIAL ID CODE

SECTION 1: BACKGROUND INFORMATION

Please answer all the questions in this survey by checking the box that fits your answer.

1. Is your child a boy or a girl?

   1☐ Boy 2☐ Girl

A doctor or other health provider could be a general doctor, a specialist doctor, a pediatrician, a nurse practitioner, a physician assistant, a nurse, or any one else you would see for health care

Who is your child's health care provider?

Family Practitioner ___
Pediatrician ___
Other ___

2. In the **last 12 months**, has your child been to see a doctor or other health provider?

   1☐ Yes ➔ 2☐ No ➔ **(Go to page 8 and continue with question 12).**

3. In the **last 12 months**, did your child's doctors or other health providers talk with you about the following:	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) Your child's growth and development	1☐	2☐	3☐	4☐
b) The kinds of behaviors you can expect to see in your child	1☐	2☐	3☐	4☐
c) How to dress, bathe, and feed your child	1☐	2☐	3☐	4☐
d) Things you can do to help your child grow and learn	1☐	2☐	3☐	4☐
e) The importance of talking to, reading to, and playing with your child	1☐	2☐	3☐	4☐
f) Ways to keep your child from being injured	1☐	2☐	3☐	4☐
g) How to make your house safe	1☐	2☐	3☐	4☐
h) How to make your car safe (e.g. car seats)	1☐	2☐	3☐	4☐

YOUR VOICE COUNTS!

CONFIDENTIAL ID CODE

SECTION II: AGE SPECIFIC QUESTIONS

4. How old is your child?

☐☐ ☐☐

Years *Months*

Your child's doctors or other health providers may talk with you about certain topics that are important for you child s development and growth. Some topics are specific to your child's age. The next questions ask you about these age-specific topics and whether your child's doctors or other health providers talked about them.

Using the diagram below, put a check in the box that matches your child's age and then find the page that matches the age of your child. Turn to this page, answer ONLY the questions found on this page, and then continue with the rest of the survey on page 7.

How old is your child?

- ☐ 1-9 months old → Go to page 4.
- ☐ 10-18 months old → Go to page 5
- ☐ 19-50 months old → Go to page 6.
- ☐ Older than 50 months old (4 years, 2 mos.) → Please STOP now and RETURN the survey at this time in the envelope provided

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5.0 ❑ Yes, my child is 1-9 months old **(Go to question 5.1 and complete this page↓)**
❑ No, my child is older than 9 months **(Go to the page 5→)**

5.1 In the last 12 months, did your child's doctors or other health providers talk with you about the following.	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) Breast feeding	1❑	2❑	3❑	4❑
b) Issues related to food and feeding (such as the introduction of solid foods)	1❑	2❑	3❑	4❑
c) The importance of placing your child on his or her back when going to sleep	1❑	2❑	3❑	4❑
d) Where your child sleeps (such as the location and type of crib whether there are stuffed animals in the crib, etc.)	1❑	2❑	3❑	4❑
e) Night waking and fussing	1❑	2❑	3❑	4❑

5.2 In the last 12 months, did your child's doctors or other health providers talk with you about the following:	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) How your child communicates his or her needs	1❑	2❑	3❑	4❑
b) What your child is able to understand	1❑	2❑	3❑	4❑
c) How your child responds to you, other adults, and caregivers	1❑	2❑	3❑	4❑
d) How to avoid burns, such as changing the hot water temperature in your home	1❑	2❑	3❑	4❑
e) The importance of showing a picture book and reading to your child	1❑	2❑	3❑	4❑

Now go to question 8 on page 7.

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6.0 ☐ Yes, my child is 10-18 months old **(Go to question 6.1 and complete this page ↓)**
☐ No, my child is older than 18 months **(Go to page 6→)**

6.1 In the **last 12 months**, did your child's doctors or other health providers talk with you about the following:	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) Vitamins and foods your child should eat	☐	☐	☐	☐
b) Your child's bed and nap time routine	☐	☐	☐	☐
c) The words or phrases your child uses and understands	☐	☐	☐	☐
d) Night waking and fussing	☐	☐	☐	☐
e) Sleeping with a bottle	☐	☐	☐	☐
f) Weaning your child from a bottle	☐	☐	☐	☐

6.2 In the **last 12 months**, did your child's doctors or other health providers talk with you about the following:	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) How your child may start to explore away from you	☐	☐	☐	☐
b) How your child "gets into things"	☐	☐	☐	☐
c) Guidance and discipline techniques to use with your child	☐	☐	☐	☐
d) Toilet training	☐	☐	☐	☐
e) The use of syrup of Ipecac if your child swallows some poison	☐	☐	☐	☐
f) The importance of reading with your child	☐	☐	☐	☐

Now go to question 8 on page 7.

YOUR VOICE COUNTS!

CONFIDENTIAL ID CODE

7.0 ❑ Yes, my child is 19-50 months old (Go to question 7.1 and complete this page ⬇)
❑ No, my child is older than 50 months (Please STOP now return the survey at this time.)

7.1 In the last 12 months, did your child's doctors or other health providers talk with you about the following:	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) Issues related to food and feeding	❑	❑	❑	❑
b) Bed time routine and how many hours of sleep your child needs	❑	❑	❑	❑
c) Things your child may start to do for himself or herself, like washing or dressing	❑	❑	❑	❑
d) Toilet Training	❑	❑	❑	❑
e) The words or phrases your child uses and understands	❑	❑	❑	❑
f) How your child is learning to get along with other children (For example at home, in play groups, at day care, or pre-school)	❑	❑	❑	❑

7.2 In the last 12 months, did your child's doctors or other health providers talk with you about the following:	YES, and my questions were answered	YES, but my questions were not answered completely	NO, but I wish we had talked about that	NO, but I already had information about this topic and did not need to talk about it any more
a) How well your child follows directions	❑	❑	❑	❑
b) Guidance and discipline techniques to use with your child	❑	❑	❑	❑
c) Ways to teach your child about dangerous situations (such as electrical sockets, the stove, hot water, pools, and the street)	❑	❑	❑	❑
d) The use of syrup of Ipecac if your child swallows some poison	❑	❑	❑	❑
e) The importance of reading with your child	❑	❑	❑	❑

Now go to question 8 on page 7.

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SECTION III: HEALTH COMMUNICATION AND INFORMATION

The next questions ask about your experiences with the health care your child has received from your child's doctor or other health providers in the past year. .

8. In the last 12 months, how often did your child's doctors or other health providers . .	Never	Sometimes	Usually	Always
a) Take time to understand the specific needs of your child	☐	☐	☐	☐
b) Respect you as an expert about your child	☐	☐	☐	☐
c) Build your confidence as a parent	☐	☐	☐	☐
d) Ask you about how you are feeling as a parent	☐	☐	☐	☐

9. In the last 12 months, how often did your child's doctors or other health providers. . .	Never	Sometimes	Usually	Always
a) Give you specific information to address any questions you may have about your child	☐	☐	☐	☐
b) Understand your family and how you prefer to raise your child	☐	☐	☐	☐
c) Talk to you about childcare arrangements	☐	☐	☐	☐
d) Talk to you about resources for parents and families (parent support groups, alternative health care)	☐	☐	☐	☐
e) Talk to you about issues in your community that may affect your child's health and development (such as lead poisoning, pool safety, community violence, gun safety, or window guards)	☐	☐	☐	☐

CONFIDENTIAL ID CODE

10. In last 12 months, how helpful were your discussions with your child's doctors or other health providers in:	Very Helpful	Helpful	Somewhat Helpful	Not at all helpful	We did not discuss
a) Helping you understand your child's behavior	☐	☐	☐	☐	☐
b) Helping you learn how to meet your own needs while caring for your child	☐	☐	☐	☐	☐
c) Learning how to protect your child from injuries	☐	☐	☐	☐	☐
d) Giving you the information you needed when you needed it	☐	☐	☐	☐	☐

11. Overall, do you feel more or less confident in doing the following things because of the information or guidance you received from your child's doctors or other health providers?	I feel a lot more confident	I feel a little more confident	I do not feel more or less confident	I feel less confident
a) Managing your parenting responsibilities	☐	☐	☐	☐
b) Protecting your child from injury and accidents	☐	☐	☐	☐
c) Doing things for your child that help him or her grow and learn such as reading and talking to your child	☐	☐	☐	☐
d) Addressing any special concerns you have about your child's development and behavior	☐	☐	☐	☐

Health information can include written pamphlets, videos you could have seen in the waiting room, recorded information over the telephone while waiting to make an appointment, information from your health plan, or information on the Internet. You could have seen or heard this information inside or outside your doctor's office.

12. In the last 12 months, did you see or hear any information about:	Yes	No
a) **Safety Tips:** How to make your house and car safe for your child (For example, information about lead poisoning or car seats or syrup of ipecac)	☐	☐
b) **Health Care Tips:** When and how often your child should see the doctor, immunization reminders, information about other health care services available for your child	☐	☐
c) **Child Care Tips:** Helpful tips about how to care for your child	☐	☐
d) **Developmental Information:** Information about your child's development and how you can help your child grow and learn.	☐	☐

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SECTION IV: HEALTH CONCERNS ABOUT THE CHILD

The next few questions ask about concerns parents sometimes have about their child.

13. * Do you have any concerns about .	Yes	A little	Not at all
a) Your child's learning, development or behavior?	☐	☐	☐
b) How your child talks and makes speech sounds?	☐	☐	☐
c) How your child sees or hears ?	☐	☐	☐
d) How your child understands what you say?	☐	☐	☐

14. * Do you have any concerns about . . .	Yes	A little	Not at all
a) How your child uses his or her hands and fingers to do things?	☐	☐	☐
b) How your child uses his or her arms and legs?	☐	☐	☐
c) How your child behaves?	☐	☐	☐
d) How your child gets along with others?	☐	☐	☐

15. * Do you have any concerns about .	Yes	A little	Not at all
a) How your child is learning to do things for himself/herself?	☐	☐	☐
b) How your child is learning pre-school skills?	☐	☐	☐
c) How your child is behind others (can't do what other kids can)?	☐	☐	☐

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16. In the last 12 months, did your child's doctors or other health providers ask if you have concerns about your child's learning, development, and behavior?

1 ☐ Yes 2 ☐ No 3 ☐ I don't remember

17. In the last 12 months, did your child's doctors or other health providers give you specific information to address your concerns?

1 ☐ Yes 2 ☐ No 3 ☐ I don't remember 4 ☐ I did not have any concerns

18. In the last 12 months, did your child's doctors or other health providers tell you that they were doing an assessment or test of your child's development?

1 ☐ Yes 2 ☐ No 3 ☐ I don't remember

19. In the last 12 months, did your child's doctors or other health providers have your child pick up small objects, stack blocks, throw a ball or recognize different colors?

1 ☐ Yes 2 ☐ No 3 ☐ I don't remember

20. Did your child's doctors or other health providers ever:	Yes	No
a) Refer your child to another doctor or other health provider	1 ☐	2 ☐
b) Test your child's learning and behavior	1 ☐	2 ☐
c) Note a concern about your child that should be watched carefully	1 ☐	2 ☐
d) Refer your child for speech-language or hearing testing	1 ☐	2 ☐
e) Give you advice about how to help your child	1 ☐	2 ☐

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SECTION V: YOUR FAMILY

A child's doctors or other health providers sometimes ask questions about a child's family. These questions help provide the best care possible for your child. These questions can be asked in a survey that you fill out before the visit, in the waiting room, or when you talked with your child's doctor or other health provider during your child's visit.

21. In the **last 12 months** have your child's doctors or other health providers asked you :	Yes	No
a) If you ever feel depressed, sad, or have crying spells	1☐	2☐
b) To talk about your own childhood experiences with him or her and how they relate to your interaction with your child	1☐	2☐
c) If any family member of the child smokes	1☐	2☐
d) If a family member uses alcohol or other drugs or substances excessively	1☐	2☐
e) If you feel safe at home	1☐	2☐

22. In the **last 12 months** have your child's doctors or other health providers asked you :	Yes	No
a) If you have someone to turn to for emotional support	1☐	2☐
b) To talk about any changes or new stressors in your family or home	1☐	2☐
c) If you have any firearms in your home	1☐	2☐
d) How parenting works into your daily activities and future plans in life	1☐	2☐
e) To talk about how you and your family are enjoying raising your child	1☐	2☐

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SECTION VI: HOUSEHOLD ACTIVITIES AND INFORMATION

These next questions ask about some of the activities in your family

23. When laying your child down to sleep at night or for a nap, in what position do you usually place your child ?

1 ☐ On Back 2 ☐ On Stomach 3 ☐ On Side 4 ☐ No Special Position 5 ☐ Not Applicable- Child Too Old 6 ☐ Other _____

24. How many times in the past week did you look at or read a book with your child?

1 ☐ Not at all 2 ☐ Once or Twice 3 ☐ Several Times 4 ☐ About once a day 5 ☐ More than once a day

Have you ...		Yes	No
25.	Put household cleaning products or medicines out of reach or in a locked cabinet?	1 ☐	2 ☐
26.	Turned down the hot water temperature on your hot water heater?	1 ☐	2 ☐
27.	Kept syrup of Ipecac in your home?	1 ☐	2 ☐
28.	Put up baby gates or other safety barriers in your home?	1 ☐	2 ☐

29. How long did you breastfeed your child?

1 ☐ My child was not breastfed 2 ☐ Less than a month 3 ☐ More than a month 4 ☐ I am still breastfeeding

30. Does anyone living in your household smoke?

1 ☐ Yes 2 ☐ No

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These next questions help us to better understand your child and his or her health care needs

31. Does your child currently need or use **medicine prescribed by a doctor** (other than vitamins)?

1☐ Yes ↓ Go to Question 31a 2☐ No → Go to Question 32

31a Is this because of ANY medical, behavioral or other health condition?

1☐ Yes ↓ Go to Question 31b 2☐ No → Go to Question 32

31b Is this a condition that has lasted or is expected to last for *at least* 12 months?

1☐ Yes 2☐ No

---

32 Does your child need or use more **medical care, mental health or educational services** than is usual for most children of the same age?

1☐ Yes ↓ Go to Question 32a 2☐ No → Go to Question 33

32a Is this because of ANY medical, behavioral or other health condition?

1☐ Yes ↓ Go to Question 32b 2☐ No → Go to Question 33

32b Is this a condition that has lasted or is expected to last for *at least* 12 months?

1☐ Yes 2☐ No

---

33. Is your child **limited or prevented** in any way in his or her ability to do the things most children of the same age can do?

1☐ Yes ↓ Go to Question 33a 2☐ No → Go to Question 34

33a Is this because of ANY medical, behavioral or other health condition?

1☐ Yes ↓ Go to Question 33b 2☐ No → Go to Question 34

33b Is this a condition that has lasted or is expected to last for *at least* 12 months?

1☐ Yes 2☐ No

34. Does your child need or get **special therapy**, such as physical, occupational or speech therapy?

1 ☐ Yes ➔ Go to Question 34a

2 ☐ No ➔ Go to Question 35

34a. Is this because of ANY medical, behavioral or other health condition?

1 ☐ Yes ➔ Go to Question 34b

2 ☐ No ➔ Go to Question 35

34b. Is this a condition that has lasted or is expected to last for *at least* 12 months?

1 ☐ Yes

2 ☐ No

---

35. Does your child have any kind of emotional, developmental or behavioral problem for which he or she needs or gets **treatment or counseling**?

1 ☐ Yes ➔ Go to Question 35a

2 ☐ No ➔ Go to Question 36

35a. Has this problem lasted or is it expected to last for *at least* 12 months?

1 ☐ Yes ➔ Go to Question 35

2 ☐ No ➔ Go to Question 36

These next questions are about you. They are being asked for grouping purposes only.

36. Is the child named in this survey your first child?

1 ☐ Yes

2 ☐ No

☐ The question does not apply to me

37. How many children under the age of 18 are living in your household (including the child named in this survey)?

1 ☐ 1

2 ☐ 2

3 ☐ 3

4 ☐ 4

5 ☐ 5 or more

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38. Are you male or female?

1 ☐ Male
2 ☐ Female

39. What is your age right now?

1 ☐ Under 18
2 ☐ 18 to 24
3 ☐ 25-34
4 ☐ 35-44
5 ☐ 45-54
6 ☐ 55-64
7 ☐ 65-74
8 ☐ 75 or older

40. How are you related to the child named in this survey?

1 ☐ Mother
2 ☐ Father
3 ☐ Aunt or uncle
4 ☐ Older brother or sister
5 ☐ Grandmother or Grandfather
6 ☐ Guardian
7 ☐ Other relative

41. What is the highest grade or level of school that you have completed?

1 ☐ 8th grade or less
2 ☐ Some high school, but did not graduate
3 ☐ High School graduate or GED
4 ☐ Some college or 2-year degree
5 ☐ 4 year college graduate
6 ☐ More than a 4 year college degree

42. How do you describe yourself? **Select all that apply.**

1 ☐ White
2 ☐ Black or African American
3 ☐ Asian
4 ☐ American Indian or Alaskan Native
5 ☐ Hispanic or Latino
6 ☐ Native Hawaiian or Other Pacific Islander
7 ☐ Other

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43. What is your current marital status?

☐	☐	☐	☐	☐	☐
I have never been married	Married	Living with significant other	Widowed	Divorced	Separated

44. Last year, that is in XXXX, what was your total income from all sources, before taxes?

☐	☐	☐	☐	☐	☐	☐	☐
Less than 10,000	10 to under 20	20 to under 30	30 to under 40	60 to under 100	100,000 or More	Don't Know	Refuse to Answer

YOU'RE DONE!!
Thank you for completing the survey.
You have helped to make a difference

Please return the completed survey in the envelope provided.

APPENDIX D

Scoring the PHDS into the PHD Measures of Care

The Promoting Healthy Development Survey (PHDS) contains 44 questions. This section describes how to score specific PHDS questions into measures of care.

Summary of the PHD Measures of Care
A high-level summary of the PHD Measures of care.

Mapping the survey questions to measures of care
A map of which individual Promoting Healthy Development Survey (PHDS) questions are scored into each measure of care

Preparing to create measure of care scores
How to create a data file re-coding the Promoting Healthy Development Survey (PHDS) response options into numeric values and to create new variables needed to score the measures of care

Creating parent-specific measure of care scores
How to calculate measure of care scores for each child/parent

Scoring measures of care for specific groups of parents/children
How to calculate measure of care scores for groups of parents/children (example, by health plan or by those enrolled in the Primary Care Case Management program of Medicaid)

Measures of Care
in the Promoting Healthy Development Survey

Calculation: The PHDS measures use enrollment data to identify parents/families of members who are no younger than age 3 months and no older than 48 months at the time of survey administration. A survey is administered to a sample of parents identified using a standardized protocol. Depending on which group is to be assessed (e.g. health plan, medical group, state program) measure of care scores are calculated as scores or rates using data obtained from the survey. The scoring algorithm shown below applies to those who wish to assess the quality of care provided in a health plan. Separate sampling and calculations are recommended for the Medicaid and commercial populations and for different structural groups being assessed (e.g. medical group, individual providers.)

Description of Measure of Care	Numerator & Denominator for the Measure of Care	Scoring Used
Measure of Care 1: Anticipatory guidance and parental education from doctor or other health provider		
<u>All respondents (Items 3a-h)</u> Talking with provider(s) or otherwise having needed information about: child's growth and development, behaviors to expect, physically caring for the child, reading and playing with child and helping child grow and learn, making house and car safe and preventing child from injury. **Age Specific Items:** <u>3-9 Months (5.1 a-g, 5.2 a-e):</u> Talk/get information about breastfeeding, issues related to food and feeding, sleeping positions and sleep area, night waking and fussing, child's responses and communication, how to avoid burns, reading a book with the child <u>10-18 Months (6.1 a-f, 6.2 a-f):</u> Talk/get information about: nutrition, sleeping/napping, preventing bottlemouth, child's communication, child's independence, guidance and discipline techniques, Syrup of Ipecac, toilet training, reading with the child. <u>19-48 Months (7.1 a-f, 7.2 a-e):</u> Talk/get information about: nutrition and eating habits, child's social interactions and communication skills, child's independence, guidance and limit setting. Syrup of Ipecac and other safety issues, toilet training, and reading with the child.	<u>Numerator</u>: Sum of the score for each eligible, individual survey respondent who reported that their child had seen a doctor or other health provider in the last 12 months. Individual scores are calculated as the sum of the scores for question 3 and to the age specific questions divided by the number of items answered. <u>Denominator</u>: All survey respondents who report that their child has seen a doctor or other health provider in the last 12 months	Mean score on multi-item scale. **Version A:** Average proportion of parents who said that "yes" the topics were discussed Points obtained for each response: Yes, and all my questions answered: 100 pts Yes, but my questions were not answered: 100 pts No, but I wish we had discussed: 0 pts No, but I got my information from other resources and did not need to discuss it any further: 0 pts **Version B:** Non-linear scoring of the items, giving credit for anticipatory guidance and parental education if the parent noted that their information needs were met. Points obtained for each response: Yes, and all my questions answered: 100 pts. Yes, but my questions were not answered: 25 pts No, but I wish we had discussed: 0 pts. No, but I got my information from other resources and did not need to discuss it any further: 75 pts.
Measure of Care 2: Health Information		

Items 12 a-d: Information provided outside/inside the doctor or other health provider's office (mail, in clinic pamphlets, videos, etc) on: safety tips, health care utilization tips, childcare tips, child development.	Numerator: Sum of the score for each respondent. Individual scores are calculated as the sum of the scores for each individual item divided by the # of items answered. Denominator: All survey respondents	Average proportion answering "yes" to the four items. Points obtained for each response: Yes, 100 pts. No, 0 pts
Measure of Care 3: Follow up for children with an indication of risk for developmental, behavioral, or social problems		
Items 13 a-d, 14 a-d, 15 a-c used to classify children as having and indication of risk. Follow up (Items 20 a-e) indicate whether some type of appropriate follow up occurred. Follow up items include testing of child's learning and behavior, referral to specialist, whether a doctor or other health provider noted a concern, and whether a doctor or other health provider gave advice to the parent to address his/her concern	Numerator: Number of respondents identified as at high/moderate risk who received follow-up. Denominator: Number of parents whose children are identified as high or moderate risk	Proportion identified as high/moderate risk that received some form of appropriate follow up least of item 20. *(Risk specific scoring algorithm use for question 20.)* Points obtained for each response: High Risk: 100 points if answered "Yes" to 20a, 20b, or 20d. Moderate Risk: 100 points if answered "Yes" to 20a, 20b, 20c, 20d, or 20e.
Measure of Care 4: Assessment of well-being of parent(s) and safety within the family		
Items 21a-b, 21 e, 22 a-e: Providers talks with parent about: depression, sadness, childhood experiences, feeling safe at home, support and stress in life, firearms, parenting along with other demands	Numerator: Sum of the score for each eligible, individual survey respondent. Individual scores are calculated as the sum of the scores for survey items 21a-b, 17e, 22a-e divided by the number of items answered Denominator: All survey respondents.	Average proportion answering "yes" to each survey item Points obtained for each response Yes: 100 pts. No: 0 pts
Measure of Care 5: Assessment of smoking and drug use in the family		
Items 21 c-d: Providers asks parent about smoking and drug use	Numerator: Sum of the score for each eligible, individual survey respondent. Individual scores are calculated as the sum of the scores for items 21c-21d divided by two. Denominator: All survey respondents	Average proportion answering "yes" to each survey item Points obtained for each response Yes: 100 pts. No: 0 pts.
Measure of Care 6: Family Centered Care *(Communication and relationship with providers)*		

Items 8a-d, 9a-f: Parent reports that provider(s) takes time to understand unique qualities and needs of child and family, respects and builds confidence in parent, asks about responds to parent's feelings, concerns and preferences and shares about resources that may help the child, parent and/or family.	Numerator: Sum of the score for each eligible, individual survey respondent who reported that their child had seen a doctor or other health provider in the last 12 months. Individual scores are calculated as the sum of the scores for 8a-d, 9a-f divided by the number of items answered. Denominator: All survey respondents who report that their child has seen a doctor or other health provider in the last 12 months.	Mean score on a multi-item scale Points obtained for each response Never: 0 pts Sometimes: 33 pts Usually: 67 pts. Always: 100 pts
Measure of Care 7: Helpfulness and effect of anticipatory guidance and counseling on confidence as a parent		
Item 10a-d, 11 a-d.: Family report of helpfulness of guidance, counseling and education. Reported increase/decrease in confidence in certain parenting actions because of information or counseling obtained from a doctor or other health provider.	Numerator: Sum of the score for each eligible, individual survey respondent who reported that their child had seen a doctor or other health provider in the last 12 months. Individual scores are calculated as the sum of the scores for survey items 10a-d, 11a-d divided by the number of survey items answered. Denominator: All survey respondents who report that their child has seen a doctor or other health provider in the last 12 months.	Mean score on a multi-item scale Points obtained for each response Not all Helpful: 0 pts Somewhat Helpful: 33 pts Helpful: 67 pts Very Helpful: 100 pts We do not discuss. Coded as Missing I feel a lot more confident: 100 pts. I feel a little more confident: 67 pts I do not feel more or less confident: 33 pts I feel less confident: 0 pts.

Mapping the Survey Questions to Measure of Care Scores

The Promoting Healthy Development Survey (PHDS) contains 44 questions. This section describes how to score specific PHDS questions into measures of care.

Measure of Care	PHDS Questions Scored Into the Measure of Care
1) Getting needed anticipatory guidance and parental education from doctor or other health provider	3 a-g 0-9 months old: 5 1-5 2 10-18 months old 8 1-6 2 19-48 months old 7 1-7 2
2) Health information	12a-d
3) Follow-up for children with an indication of risk for development, behavioral, or social problems.	Scored for only those at high/moderate risk 20 a-e
4) Assessment of well being of parent/ guardian and safety within the family	21 a-b, 21e 22 a-e
5) Assessment of smoking and drug use within the family	21 c-d
6) Family centered care	8 a-d 9a-f
7) Helpfulness and effect of care provided	10 a-d 11 a-d

Preparing to Create Measure of Care Scores:
How to get from the Raw Survey Data to Scored Survey Data

Step 1: Create a Data File
Create a data file that quantifies the responses given by each respondent who uses the response codes for the Promoting Healthy Development Survey (PHDS).

(CW LINK HERE TO THE DATA DICTIONARY, in this folder)

Step 2 Re-coding Response Options

Re-code the response choices in the data file so that they can be scored into measures of care (*See the table below for exact re-code guidelines*). The re-coded response options will contain the number of points that each response contributes to the scoring of the question and measure of care.

The table below shows each of the questions scored into quality measures and the scores received for each response choice:

Questions	Response Choice	Score for Each Response Choice
Measure of Care: Getting needed anticipatory guidance and parental education from doctor or other health provider		
Scoring Version 1A Average proportion of parents who said that "yes" the topics were discussed		
3a-3g 5.1-5.2 6.1-6.2 7.1-7.2	1. Yes and my questions were answered 2. Yes, but my questions were not answered completely 3. No, but I wish we had discussed that 4 No, but I already had information about this topic and did not need to discuss it any more	1 = 100 points 2 = 100 points 3 = 0 points 4 = 0 points
Scoring Version 1B: Non-linear scoring of the items, giving credit for anticipatory guidance and parental education if the parent noted that their information needs were met.		
3a-3g 5.1-5.2 6.1-6.2 7.1-7.2	1 Yes and my questions were answered 2. Yes, but my questions were not answered completely 3 No, but I wish we had discussed that 4 No, but I already had information about this topic and did not need to discuss it any more	1 = 100 points 2 = 25 points 3 = 0 points 4 = 75 points
Measure of Care: Family Centered Care		
8 9	1 Never 2 Sometimes 3. Usually 4. Always	1 = 0 2 = 33 3 = 67 4 = 100
Measure of Care: Helpfulness of care		
10	1. Not at all helpful 2. Somewhat helpful 3 Helpful 4 Very helpful 5 We did not discuss	1 = 0 2 = 33 3 = 67 4 = 100 5 = Not scored
Measures of Care: Health Information; Assessment of well being of parent/guardian and safety in the family; Assessment of smoking and drug use in the family.		
12 20 21 22	1. Yes 2 No	1 = 100 2 = 0
Measure of Care: Effect of Care Provided		
11	1 I feel a lot more confident 2 I feel a little more confident 3 I do not feel more or less confident 4 I feel less confident	1 = 100 points 2 = 67 points 3 = 33 points 4 = 0 points

For example, if a person answered "**Yes**" to question 11a *"In the last 12 months did you receive any information from your health plan about* ***Safety Tips:*** *How to make your house and car safe for your child"* then he or she would get a score of 100 points. However, if another person answers this same question in the survey as "**No**" then he or she would get a score of 0 points for that particular question.

- For purposes of calculating the measures of care, responses that are coded as missing are not given a score and are not included in the calculation of the measure of care for each respondent
- For items **10** a-c, if the response choice "We did not discuss" is marked, then the answer to the specific item is re-coded as missing and is *not* included in the scoring of the measure of care for each respondent.
- Quality scores are only calculated for those respondents who answer at least half of the items that are included in the measure of care that are based on multi-item scales

How to Score the Measures of Care for Each Respondent

Each individual receives measures of care scores that are between 0-100 for each of the seven measures of care. The table below explains how each quality measure is calculated for **each child/parent answering the survey.**

Measure of Care	PHD Survey Questions	Scoring of Measure of Care
1_A. Anticipatory guidance and parental education from doctor or other health provider (Version A: Average Proportion of Parents Who Said "Yes" the Topics Were Discussed)	3a-g (7 items) 0-9 months old: 5.1-5.2 (12 items) 10-18 months old: 6.1-6.2 (14 items) 19-48 months old: 7.1-7.2 (14 items)	Mean score on multi-item scale 0-9 months. Had to answer at least 9 questions in this quality measure in order to be scored. 10-18 months. Had to answer at least 10 questions in this quality measure in order to be scored. 19-48 months. Had to answer at least 10 questions in this quality measure in order to be scored.
1_B. Anticipatory guidance and parental education from doctor or other health provider (Version B: Non linear scoring of items, giving credit for anticipatory guidance and parental education if the parent noted that their informational needs were met)	3a-g 0-9 months old: 5.1-5.2 10-18 months old: 6.1-6.2 19-48 months old: 7.1-7.2	Mean score on multi-item scale. 0-9 months. Had to answer at least 9 questions in this quality measure in order to be scored. 10-18 months. Had to answer at least 10 questions in this quality measure in order to be scored. 19-48 months. Had to answer at least 10 questions in this quality measure in order to be scored.
2) Health information	12a-d	Average proportion answering "yes" to the 4 questions. Had to answer at least 2 questions in this quality measure in order to be scored.
3) Assessment and follow-up for children with an indication for risk of developmental, behavioral, or social problems	Scored for only those at high/moderate risk. 20 a-e	Only scored for children of high/moderate risk. Proportion who received some sort of follow up. Riske specific score used: Up High Risk. Had to answer either 16a or 16c or 16d or *both* 16b and 16e. Moderate Risk. Had to answer yes.

Measure of Care	PHD Survey Questions	Scoring of Measure of Care
4) Assessment of well-being of parent/guardian and safety within the family	21 a-b, 21e 22a-e	Average proportion answering "yes" to each of the 8 questions. Had to answer at least 4 items in this quality measure in order to be scored.
5) Assessment of smoking and drug use within the family	21 c-d	Average proportion answering "yes" to each of the 2 questions. Had to answer both of the questions in this quality measure in order to be scored
6) Family centered care:	8 a-d 9 a-f	Mean score on a multi-question scale. Had to answer at least 5 questions in this quality measure in order to be scored
7) Effect of care received	10 a-d 11 a-d	Mean score on a multi-question scale. Had to answer at least 4 questions in this quality measure in order to be scored.

Example of Scoring: Example of scoring measure of care # 2:

- *Parent answers items in quality measure 2 in the following way:*

11a- Yes
11b- No
11c- Yes
11d- No

- *These responses are re-coded for the following values:*

11a- 100
11b- 0
11c- 100
11d- 0

- *Parent's score for quality measure 2=*

$$\frac{100 + 0 + 100 + 0}{4} = \frac{200}{4} = 50$$

Scoring the Measures of Care for Specific Groups of Parents/Children

Once parent/child level measure of care scores have been created, then measures of care for **groups** of parents can be scored

Throughout the rest of the document the term "unit of analysis" will be used. A "unit of analysis" for the PHDS means a group of parents/children that you would like to score the measures of care specific to.

Examples of what we mean by a "unit of analysis" include:

- Parents/children insured by Medicaid
- Parents/children enrolled in a specific program (e.g. Fee-for-Service Primary Care Case Management)
- Parents/children in a specific health plan
- Parents/children residing in a specific County
- Parents/children served by a specific medical group or clinic

For each unit of analysis being measured, the measure of care score for the unit of analysis is =

$$\frac{\text{Sum of Each Individual Respondent's Quality Score}}{\text{Number of Individuals with a Quality Score}}$$

In other words, the measure of care is the **average score** for all respondents for whom the measure of care could be calculated.

For example, measure of care # 1 is "Getting needed anticipatory guidance and education from doctor or other health care provider". This measure of care is only scored for those parents who report that their child has been to see a doctor or other health care provider in the last 12 months. Therefore, the denominator for the measure of care score is not the total number of respondents, rather it is the number of respondents who report that their child had a visit and who answered

Example of Scoring Measure of Care #2 For Health Plan Unit of Analysis:
Let's say that four parents are the only members in a health plan.

The score for measure of care # 2 for the health plan would then be equal to the sum of the individual scores for all 4 parents for quality measure 2 divided by the number of people (4):

Parent 1- 50

Parent 2- 100

Parent 3- 0

Parent 4- 100

The health plan score for measure of care # 2 =

$$\frac{50 + 100 + 0 + 100}{4} = \frac{250}{4} = 62.5$$

APPENDIX E

MEMORANDUM

March 3, 2003

TO: Diedre Chambers, MS
Oklahoma State Department of Health
Children First

FROM: Shari Kinney, RN, MS, MPH
OSDH IRB Administrator

IRB #908 Oklahoma State Department of Health IRB # 1
FWA00000183

SUBJECT: 03-04 *Provision of Child Development Knowledge to Parents by Primary Care Providers*

The OSDH Institutional Review Board has conducted an expedited review of *Provision of Child Development Knowledge to Parents by Primary Care Providers.* The informed consent document and research proposal is hereby approved and you may begin subject enrollment. It is the Board's judgment that the rights and welfare of the individuals who may be asked to participate in this study will be respected; that the proposed research, including the process of obtaining informed consent will be conducted in a manner consistent with the requirements of 45 CFR 46, as amended; and that the potential benefits to the subjects and to others warrant the risks subjects may choose to incur.

As principal investigator of this project, it is your responsibility to insure that this study is conducted as approved by the Board. Any modifications to the protocol or consent form will require prior approval, which you may request in an amendment letter or memorandum to me.

This approval is granted for a period of one year. A periodic progress report is required by February 19, 2004, summarizing study results to date, or a summary of the completed study.

If you have questions or need additional information, please contact Shari Kinney, IRB Administrator at (405) 271-9444 ext. 56738 or by E-mail at sharik@health.state.ok.us.

Thank you.

APPENDIX F

Oklahoma State University
Institutional Review Board

Protocol Expires: 4/20/2004

Date Monday, April 21, 2003 IRB Application No HE-0364

Proposal Title THE PROVISION OF CHILD DEVELOPMENT KNOWLEDGE TO PARENTS BY THE PRIMARY CARE PROVIDER

Principal Investigator(s)

Diedre Chambers
Rt 1 Box 46H
Hydro OK 73048

Patricia Self
226A HES
Stillwater, OK 74078

Reviewed and Processed as Exempt

Approval Status Recommended by Reviewer(s) Approved

Dear PI

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 415 Whitehurst (phone 405-744-5700, sbacher@okstate.edu).

Sincerely,

Carol Olson

Carol Olson, Chair
Institutional Review Board

APPENDIX G

Oklahoma State University
Institutional Review Board

Protocol Expires: 4/20/2004

Date Thursday, June 19, 2003 IRB Application No HE0364

Proposal Title: THE PROVISION OF CHILD DEVELOPMENT KNOWLLEDGE TO PAREEENTS BY THE PRIMMARY CARE PROVIDER

Principal Investigator(s)

Diedre Chambers
Rt 1 Box 46H
Hydro OK 73048

Patricia Self
226A HES
Stillwater OK 74078

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved **Modification**

Please note that the protocol expires on the following date which is one year from the date of the approval of the original protocol

Protocol Expires: 4/20/2004

Signature

Carol Olson, Director of University Research Compliance

Thursday, June 19, 2003
Date

Approvals are valid for one calendar year after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board

VITA

Diedre J. Chambers

Candidate for the Degree of

Master of Science

Thesis: THE PROVISION OF CHILD DEVELOPMENT KNOWLEDGE TO PARENTS BY THE PRIMARY CARE PROVIDER

Major Field: Human Development and Family Science

Biographical:

Personal Data: Born in Portsmouth Virginia, on August 8, 1956, daughter of Earl and Donna Luttrull. Married to Bob Chambers; two sons, Tyler and Robby.

Education: Received a Bachelor of Science in Nursing from Southwestern Oklahoma State University in Weatherford, Oklahoma in May 1989. Completed the requirements for the Master of Science degree with a major in Family Relations and Child Development at Oklahoma State University in December, 2003.

Experience: Nursing supervisor at Western State Hospital in Ft. Supply from January 1978 through 1979; staff nurse at Children's Memorial Hospital in Oklahoma City from January 1980 through April 1983; dietary nurse at Nutri-System Weight Loss Center from April 1983 through July 1985; Adjunct clinical instructor at Southwestern Oklahoma State University in Weatherford, Oklahoma from 1991 through 1992; Park View Hospital Home Health in El Reno Oklahoma from June 1989 through 1996; Executive Director of Savannah Square Assisted Living in Weatherford, Oklahoma from November 1996 through 1997; clinical instructor for De Marge College LPN School in Oklahoma City, Oklahoma in 1998; Caddo-Kiowa Vo-Tech Center adjunct instructor in Ft. Cobb, Oklahoma from June1995 through May 1998; from April 1998 to present, Children First Nursing Manager at the Oklahoma State Department of Health in Oklahoma City, Oklahoma.

Honors: Graduated Cum Laude; Outstanding Senior Nursing Student and Chairman's List; certified Partner's In Parenting Education trainer.