

Comprehensive Child Health Assessment and Planning Survey: Secondary Data Report

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by the

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INTRODUCTION

Cook Children’s Health Care System (Cook Children’s) has established a commitment “to improve the health of children in the six counties [they serve]. This requires coordinated community-wide health resources and health information . . . based upon reliable, local health information about our children . . . that is only available through a community-wide child health assessment.” To accomplish this goal, Cook Children’s has embarked on a journey to make reliable, local health data consistently available for their six-county service region that includes Denton, Hood, Johnson, Parker, Tarrant, and Wise Counties. An in-depth assessment in these counties is necessary to determine the health status and needs of the children they serve. Key secondary data from government and other professional sources are represented in this report as one component of that overall assessment.

In a collaborative effort with Cook Children’s representatives, the Center for Community Health Development (CCHD) at the Texas A&M Health Science Center School of Rural Public Health developed a set of secondary data indicators for children in the six-county service region of Cook Children’s (see Appendix A). These secondary data indicators illustrate the health of children in seven data categories that include demographics, physical health, dental health, emotional and mental health, safety, family health and activities, and health care access.

This report and the accompanying data are the result of collection from more than 60 different sources. The data were found in a mixture of electronic and paper formats from national, state, county, and city organizations and agencies. The data templates accompanying this report include indicators for children less than 18 years of age and adults (as adult health may be the best or only indicator of child health in some categories). They also include the national *Healthy People 2010* goals and objectives where they pertain to child health.

PURPOSE

The underlying secondary data upon which this report is based were compiled to assist Cook Children’s in an endeavor known as the Children’s Community Health Assessment and Planning Survey (CCHAPS). This commitment to the six-county region of CCHAPS has led to the creation of a unique data array unparalleled nationally as a local resource of information on child health. It is our hope at the Center for Community Health Development that this data will assist Cook Children’s and its partners to fulfill their promise of improving “the health of children in the six counties” they serve.

A clear benefit of this large secondary data compilation to Cook Children’s, as well as the key leaders and organizations, is its intended usage. Cook Children’s plans to use and share the data with key community leaders and organizations primarily to:

- Determine needs and service priorities for child health services;
- Determine funding priorities for programs that address child health issues and access to health services;
- Track progress made on addressing child health issues; and
- Enhance collaborative relationships with other entities and organizations sharing a concern for the health of children.

Cook Children’s conducted a series of community listening sessions and focus groups with various members of the regional communities early in 2008 and hosted a strategic gathering of key political representatives, community leaders, and other organizational partners in June of that year. This strategic gathering, the Children’s Health Data Exchange, provided great insight into both the purpose and the need for CCHAPS. Listening sessions, focus groups, key interviews, and the Children’s Health Data Exchange were endeavors by Cook Children’s to involve the region and their communities in improving the many gaps that children and their families may be experiencing in the current available fragmented system. The many geographic needs represented by the speakers and attendees of the various meetings and the Children’s Health Data Exchange produced rich dialogue that made clear the frustrations experienced due to a lack of knowledge necessary for effective change.

This report is the next step in the CCHAPS project. Cook Children’s has set out on a journey that has already included listening sessions of different groups internal and external to their organization, secondary data collection and analysis, a community call to invite and involve organizations within their service area, and preparation of an assessment data tool. The dedication to CCHAPS by Cook Children’s is to be commended as they embark on primary data collection through a service-wide assessment of child health. Our goal for this document is to provide information for that assessment based on the available secondary data related to the health of children in the six-county region.

PERSPECTIVE OF SECONDARY DATA ANALYSIS

Data that has already been collected by other organizations can inform investigators about the population and provide direction for further research. One of the goals of the Children’s Health Data Exchange was clearly to collect data that would be made available to key leaders and organizations. As this data is compiled and made available, further investigation of child health can be expedited quickly and at a reduced cost. Additionally, the Data Exchange and the secondary data analysis project can build collaboration among previously unconnected organizations that may share common interests and concerns about children.

Important issues for the secondary data collection identified through listening sessions, focus groups with parents, the Children’s Health Data Exchange, and interviews with internal and external stakeholders include:

- General health of children;
- Access to routine, preventive/primary medical care;
- Immunizations/Vaccinations;
- Access to dental/oral health care;
- Availability of resources and information ;
- Moderate to severe health conditions;
- Mental health care;
- Health Insurance Coverage;
- Lifestyle/Weight/Nutrition
- Socio-emotional difficulties
- Intentional injuries
- Access to prescription medication

While many of these issues may seem commonplace and well-understood, largely as a result of the amount of media coverage they receive, frequently the reality is that there just is not enough county- and/or community-specific data to draw meaningful conclusions about relative priorities among problems that could guide the development of programs or the allocation of scarce resources. At the same time, without an in-depth analysis of the data that are available, an informed decision cannot be made as to the direction of the next step in the CCHAPS project.

Secondary data analysis is necessary to provide benchmarks in determining key issues before and after primary data is collected. While it may not be prudent to use only secondary data to set a goal, the data themselves do provide context and allow for more effective preparation of assessment tools in the primary data collection process (and later during analysis). For example, one issue identified by Cook Children’s is the much publicized problem of overweight and obese children. As was verified at the Children’s Health Data Exchange meeting, the most basic measure of childhood overweight/obesity, Body Mass Index (BMI), is not readily available. What seems like obvious and readily available information, as one participant at the Children’s Health Data Exchange voiced his frustration, “The data are not accessible!” This observation reinforced the widespread and deeply felt need to better communicate and share existing information and to assure that new data collected is readily available to others.

OVERVIEW OF REPORT

This report summarizes the data collected from many sources (see Appendix A) and organized according to the data categories determined by Cook Children’s. The seven data categories include: demographics, physical health, oral health, emotional and mental health, safety, family health and activities, and health care access and are presented here in that order. Each category contains indicators of child health and the data available to date on each indicator.

It is unfortunate, but at the same time a critical finding in and of itself, that the **greatest amount of detail in the following pages is about the information gaps** of the child population of the six counties. The discussion about child health data that took place at the Children's Health Data Exchange reinforced this observation. This report, including the data templates, clearly prove that more information is necessary for Cook Children's and its key community leaders and organizational partners to fulfill their goal to serve children in the six-county service area.

METHODS

The data categories chosen by Cook Children's are significant to all aspects of a child's life. Information ranging from race/ethnicity to how many times a week a child reads or is read to affects lifestyle and health. The Center for Community Health Development conducted an intensive search for sources of any data pertaining to children from 0-14 years of age. The data sources identified ranged from local organizations and health departments to large organizations such as the March of Dimes and other large foundations dedicated to the health of children. On the surface, it seemed as though there was a wealth of information that would help paint the picture of the health of children. Unfortunately, part of what we learned was that many organizations reported the same secondary data, over and over.

While there are a large number of reports about child health in the service area, in differing demographics ranging from the city to the national level, many of them reference the same local, state, and national sources of data. Many organizations have used this same information simply because it is what is available. While in one sense this makes the task of assembling this data easier, it raises the larger question which applies to all secondary data – that is, what is the validity of the data? Validity is a concern in several ways. Because so-called “secondary data” was collected for another “primary” purpose, it is possible that the way in which the data were collected influences its generalizability and interpretability. For example, Census data, per the U.S. Constitution, is collected every ten years for the purpose of establishing our representative form of government. Any use other than that introduces possible bias or error of interpretation. The kind of precision we expect in scientific applications is not required for Census purposes – for example the Census is assumed to have about a 10 percent margin of error. Given the rapid changes in populations small areas (e.g., communities) can experience, it is not uncommon for Census estimate to err by as much as 50 percent and still meet the standards against which the Census is to be compared. A 50 percent margin for error would hardly be acceptable in a project such as CCHAPS, but one of the most frequently cited sources of information is the U.S. Census Bureau. This is not meant as a criticism of the Census, but rather an example of how one must be cautious in the interpretation of secondary data to be sure we understand any inherent limitations.

Other consideration of secondary data include the age of data – is it out-of-date but perhaps all that is available, the units of measure – is the population examined ages 0 to 14, 0 to 18, or 0 to 17 (different), among other considerations.

Collection of secondary data on children revealed all types of data ranging from electronic data that needed sorting and analysis to informational paper reports and articles from different local organizations and journals. Staff of the Center for Community Health Development did their best to incorporate the most reliable and valid data available into this report. Limitations and considerations are noted throughout this report, when necessary.

FINDINGS

This section of the report contains information about child health and health care needs, highlighting what is known and a brief overview of what additional information is necessary to complete the picture of child health desired through this overall initiative.

Demographics

In 2006, the Texas State Demographer estimated that the state had approximately 6,737,014 children from newborn to age 18. The group 0 to 14 was estimated at 5,287,340. About 745,210 or 11 percent of those children 0 to 18 were estimated to reside in the six-county service area of Cook Children's. A similar proportion (11%) was estimated for those 0 to 14 years of age. When the age distribution of children living in the six-county region was compared with the state overall, almost no differences were found – the total 0 to 18 for the region is 28 percent of the region's population, while the percent 0 to 18 for the state is 29 percent.

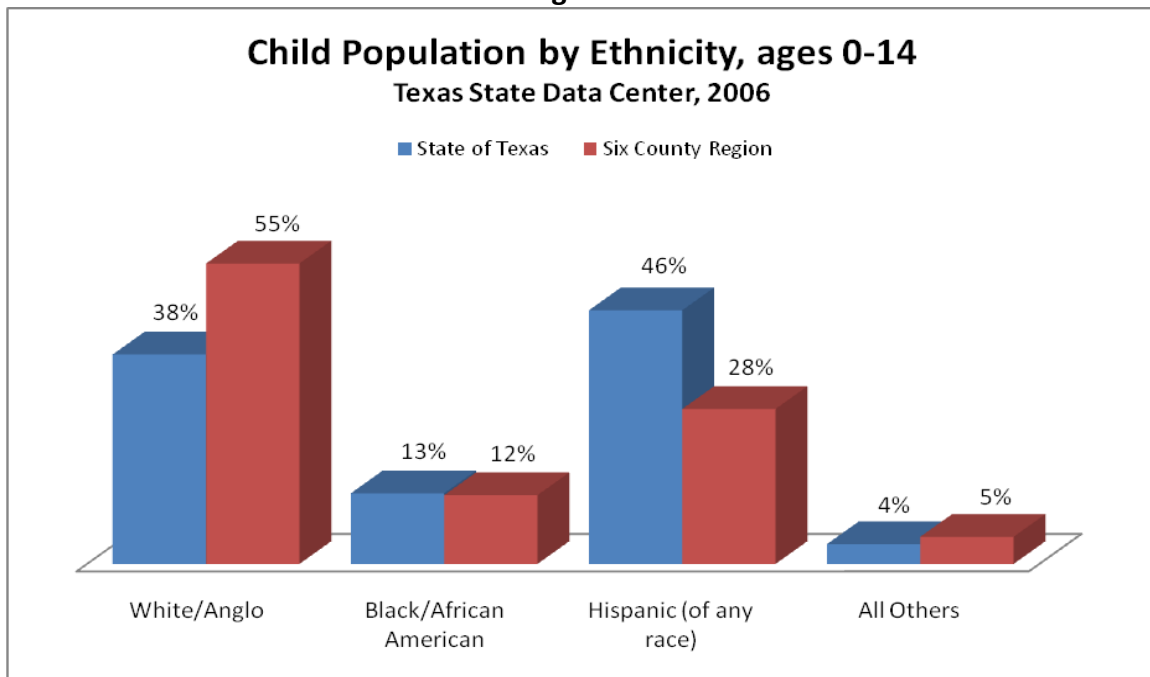
Figure 1 depicts the differences on the basis of race/ethnicity between children living in Texas and those that reside within the service area. As can be seen there are significant differences in racial composition. The proportion of children described as White/Anglo for the state is 39 percent, while for the region that percentage is much higher at 55 percent. The differences in distribution are not among the Black/African American or "all others" populations but rather the significant difference is in the size of the Hispanic (of any race) population – 45 percent for Texas and 28 percent for the region. The reader should be cautioned that the analysis of population data can be problematic – for example, some data sources treat Hispanic as a separate "race" category, others treat it as an ethnic group which can be composed of persons of any race. As a result, one frequently sees totals of more than 100 percent of a population – when race and ethnicity are mixed in data tables.

While less ethnically/racially diverse than the state overall, the mixed cultural and ethnic diversity seen among the children of the region poses a challenge for Cook Children's in two ways. One, approaches that may have been appropriately developed for statewide application may not be appropriate in the six-county region. And second, given the rapidly growing Hispanic population across the state, it would be imprudent not to prepare for a substantially

more diverse population in the future. The Texas KIDS COUNT Annual Data Book for 2006 stated “between 2000 and 2004, the Hispanic child population statewide increased almost three times faster than the total child population.”

These population differences can be measured from a variety of perspectives and influence the design of programs and services quite directly. For example, an estimated 27,000 children in Tarrant County under the age of 17 were born outside of the US and more than 60,000 children in Fort Worth were living in immigrant families in 2006 (American Community Survey). Almost 196,000 people living in Tarrant County over the age of five speak a primary language besides English and “speak English poorly” (American Community Survey, 2007). This data represents barriers that all providers of health care are experiencing. Up to date and service area specific data will assist in decision making.

Figure 1



As has been discussed, there were an estimated 587,714 children under the age of 15 in 2006 living in the six-county service area of Cook’s Children’s Health Care System (Texas State Data Center, 2008). One perspective to consider is that irrespective of those children that have special needs and live in conditions that poorly affect their health, just providing for the developmental, mental, physical, and emotional needs of this population is already a daunting task. Even without diagnosed medical conditions, the proportion of children that require care above and beyond that of a normally developing child is represented in the numbers of children who are living at various levels of poverty, are homeless, require special education, living with parents who do not have a high school diploma, living in foster care, living with grandparents,

living in single parent homes, and any other situation that would put the child at risk for poorer health in any area of health including physical, mental, emotional, and developmental.

Unfortunately these unique situations do not occur solely on their own, we know that some children experience multiple, simultaneous threats to their health, even if we do not know how many and which ones most frequently occur together. For example, we know for a rapidly increasing segment of the population, grandparents responsible for raising their grand children, that 14.1 percent of them are in poverty. Additionally 23.7 percent of those grandparents are disabled. What we do not know is how many were caring for their grandchildren while living in poverty and have a disability. However, one can easily assume that these problems overlap because if you sum all of the categories reported for grandparents, “172.9 percent” are represented (Center for Community Health at UTHSC, 2008).

All this information suggests that simple demographic profiles may not be sufficient information upon which to plan regional efforts to improve child health. Primary data collection through the proposed survey, should give careful consideration to collecting additional details around demographic characteristics not readily available from local, state or federal sources. Some demographic data suggested by the Forum on Child and Family Statistics (2007) include increased detail about family structure and cohabitation. Examples of this type of data include homelessness, blended families, families with disabilities, and single parent households (including mother, father, and grandparent lead households).

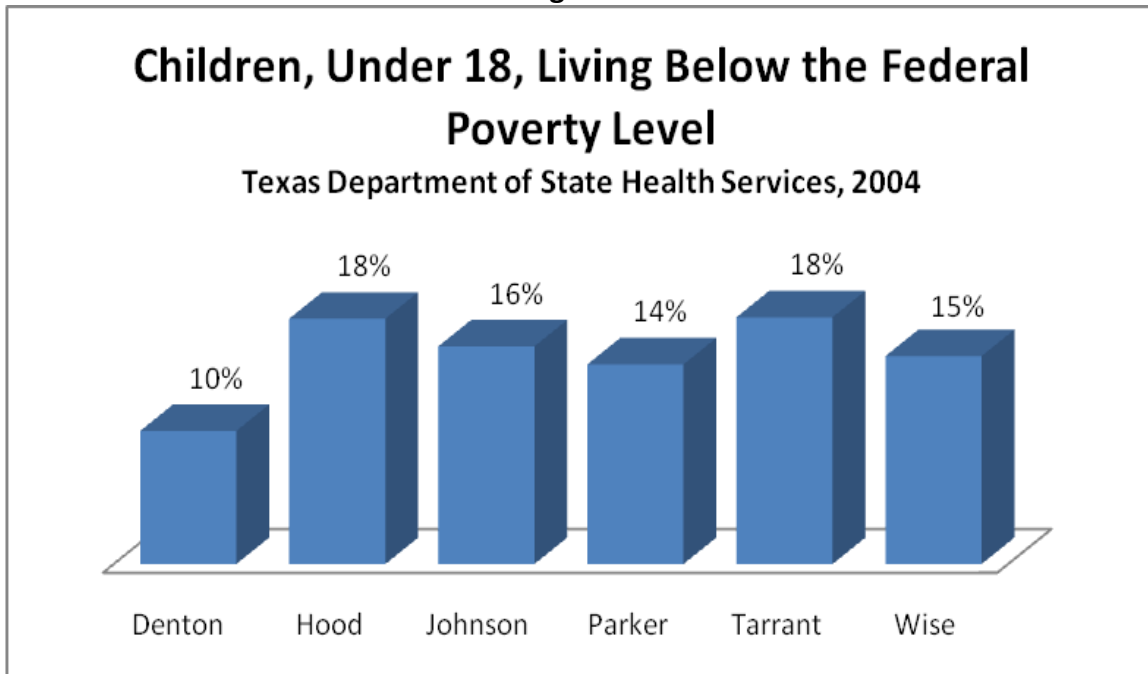
Socio-Economic Status

In Cook Children’s service region in 2007, the range of children living below the federal poverty level (FPL) was 6.9 to 22 percent by county (with Parker having the lowest of 6.9% and Wise having the highest of 22%) (American Community Survey, 2007). Living in poverty will affect aspects of the lives of children that Cook Children’s are especially interested in, including living conditions, access to health care, adequate nutrition, and developmental health. According to the Center for Public Priorities, half of Texas children in 2003 lived in families with an income at or below 200 percent of FPL and in 2005, 1 in 10 children lived in extreme poverty. Considering that the eligibility cut off for Children’s Health Insurance Program (CHIP) is 150 percent of FPL, many children are not receiving care or are entering care without adequate ability to make payment. It has been found that children living in poverty are three times more likely to die, are twice as likely to be high school drop outs, nine times as likely to be neglected, and twice as likely to have extreme behavior problems as children living in households with incomes above the FPL (The Children’s Defense Fund, 2006).

Although some data exists, in general there is a significant lack of information about children living in low-income households. Families of four with an income of \$40,000 dollars a year (which is 200% of FPL for a family of four) may experience economic stress – and subsequently mental and physical stress as a result of difficulties with meeting basic household expenses, paying for food, housing, medical expenses, and providing transportation (Center for Public Policy Priorities, 2006). Further issues of socio-economic status may also be considered; such

as the differences of children experiencing long term poverty versus short term poverty and the status of children living in families of the working poor. The current national environment of economic uncertainty may present an opportunity to collect data that could give further insight into how the national economy affects children’s health opposed to individual and family socio-economic status. Figure 2 illustrates poverty levels of children living in the six-county service region of Cook Children’s in 2007. Current federal poverty levels are not available on all counties.

Figure 2



Physical Health

The health concerns associated with childhood are different than those of adults. Most children do not get heart disease, are not dying of lung cancer, do not break their hips or bones without healing. That said, there are chronic conditions that start at birth and there are some ailments that are unique to childhood. For instance, ear infections, birth defects, preventable childhood diseases (such as measles and chickenpox), sudden infant death syndrome (SIDS), growth retardation and developmental delays (due to various diseases and environmental, emotional, and physical stressors), environmental toxicity (due to their inherency to “put everything in their mouths”), physical injury, cancers, and other chronic conditions are among those most commonly recognized as diseases and adverse health events of childhood. In the following sections we will address many of these concerns.

Immunization

In 2007, 77.4 percent of the children in the U.S. and 77.3 percent of children in Texas between 19 and 35 months had received the recommended vaccination series commonly known as 4:3:1:3:3:1 series (National Immunization Survey). The nation's goal for immunization in children between 19 and 35 months for each individual vaccination is 90 percent; the goal for fully immunized children between 19-35 months is 80 percent (*Healthy People 2010*). A national effort around immunizations over the past two decades has done well in increasing immunization. For specific populations, however, the results are not quite as positive. For example, in 2005 only 77 percent of the children who live below the poverty level were fully vaccinated while those that lived above it had a vaccination rate of 83 percent by the targeted age of 35 months (Federal Interagency Forum on Child and Family Statistics). This gap in vaccination coverage associated with poverty has been ongoing for many years (Federal Interagency Forum on Child and Family Statistics). This disparity is one that all providers of children's care should address. This is also a good reminder that the risk of children living in poverty significantly increases the risk of an adverse health event.

Information on the vaccination rates of children in the service region is not available. After children enter into kindergarten, vaccines rates jump due to school regulations. However, there is not local information on how many children receive booster inoculations such as the tetanus vaccine into childhood. As a result, another recommendation for the survey is to attempt to collect immunization data on children in the region – particularly co-called “booster” shots and vaccinations during toddler hood and later age immunizations.

Acute Illness

An estimated 50 percent of acute illnesses seen in childhood are respiratory conditions, with the primary illness being the common cold. The types of diseases seen in childhood vary by age; however, illness is not a random occurrence. Children who experience health problems are more likely to experience the same health problem again. This is unfortunate for families and health care providers considering that poor children have more health problems (Nursing Care of Infants and Children).

National- and state-level data are not readily available that adequately document the full range of childhood illnesses. Diseases required to be reported by physicians and those which require hospital admission are the two exceptions. Of course anyone with a child can tell you the vast majority of childhood illnesses do not result in a hospitalization, and frankly most are not seen by a physician. The data that are available on the health of children include a large number of very infrequently occurring conditions: acquired immune deficiency syndrome (AIDS), amebiasis, anthrax, asbestosis, botulism, brucellosis, campylobacteriosis, chancroid, varicella, chlamydia, Creutzfeldt-Jakob disease (CJD), cryptosporidiosis, cyclosporiasis, dengue fever, diphtheria, ehrlichiosis, encephalitis, Escherichia coli infections, gonorrhea, haemophilus influenzae, Hansen's Disease (leprosy), Hantavirus infection, Hemolytic Uremic Syndrome (HUS), Hepatitis A, B, C, D, E and unspecified, lead in the blood, legionellosis, listeriosis, lyme

disease, malaria, measles, meningitis, meningococcal infections, mumps, pertussis, pesticide poisoning, plague, polio, Q Fever, rabies, relapsing fever, rickettsioses, rubella, salmonellosis, severe acute respiratory syndrome (SARS), shigellosis, silicosis, smallpox, spotted fever, staphylococcus aureus infection, streptococcal disease, syphilis, tetanus, trichinosis, tuberculosis, tularemia, typhoid fever, typhus, vibrio infections (including cholera), viral hemorrhagic fever, West Nile Fever, yellow fever, and yersiniosis. The utility of this data for regional planning purposes is extremely limited. As a result, they are not included in this report or in our recommendations for inclusion in the proposed survey.

Another approach to understanding the incidence and prevalence of childhood diseases might be found in an examination of data related to the types and number of antibiotics prescribed by physicians for their child patients. Ear infections (otitis media) are among the most common diseases in early childhood; 80 percent of children have had at least one infection and 50 percent have had three or more by the time they are three years old (Nursing Care of Infants and Children). The risk factors of ear infections include secondhand smoke, crowded living conditions, and parent's history of otitis media (Nursing Care of Infants and Children). In Texas, 5.9 percent of children between 3 and 17 years old had three or more ear infections in a 12 month period (US Department of Social and Health Services; Maternal and Child Health Bureau). In the U.S., 47 percent of children under age 5 who had an ear infection were prescribed antibiotics (*Healthy People 2010*). Based on the information available, there is an apparent information gap on childhood disease and illness in the service region of Cook Children's.

Chronic Conditions

While acute illnesses can be a major detriment to children, chronic illnesses are a concern in child health due to their long term capacity to potentially affect every area of health for a lifetime (Nursing Care of Infants and Children). These conditions include cystic fibrosis, spina bifida, asthma, mental retardation, diabetes, mental illness, dental caries (please see oral health section below for further information on this chronic condition), and possibly even obesity. Children with chronic illnesses spend more time in the hospital, more time out of school, are more likely to be limited in their activity, are more likely to be a victim of abuse, are more likely to have behavioral health problems, and are more likely to be involved with the juvenile justice system than their peers without chronic conditions (Nursing Care of Infants and Children).

Three chronic and increasingly common conditions to discuss are asthma, diabetes, and obesity. Asthma is the most prevalent chronic condition in childhood, followed by type 1 diabetes (Texas Diabetes Council, 2007). There were 710 preventable hospitalizations due to pediatric asthma in the Cook Children's service area in 2005 and about 58 due to pediatric diabetes (Texas Department of State Health Services; Center for Health Statistics). The trends in asthma have been consistent over time with about 13 percent of our nation's children being diagnosed with asthma at some time in their lives (Federal Interagency Forum on Child and Family Statistics, 2007). To date, there are no national health indicators or data to be found for

childhood diabetes. This is true when type 2 diabetes is on the rise in childhood nationwide. However, the Texas Diabetes Council (2007) has estimated that one in 400 to 600 children less than 18 years old have type 1 diabetes. In 2004-05, 42 percent of Texas children in the fourth grade were projected to be overweight or obese (Texas Department of State Health Services). The consequences of being overweight or obese in childhood are often psychosocial; however, they also include diabetes and other cardiovascular risks (Federal Interagency Forum on Child and Family Statistics).

Although prevention of disease and adverse health events can be the goal, the problems that plague our most vulnerable population are relatively unknown. Where there is specialty care you will find children with special needs, but some of the children in the service area of Cook Children's live in rural areas and/or are poor, both of these situations limit access and make scarce the knowledge about this population. The Federal Interagency Forum on Child and Family Statistics has identified disability as a priority indicator in child health. They report that it is no easy task to measure disability due to disagreement about what it is and how it should be measured.

Environmental Health Risks

Children are especially susceptible to toxins in their environments. Besides the very obvious childhood behavior of hand to mouth exploration, children metabolize substances differently than adults and their rapidly growing bodies and dividing cells are affected by exposure differently.

Due to the lead exposure from toys produced in China, the toxicity and effects of lead has been heavily covered by the media in recent months. Lead is a good example of how differently children and adults are affected by exposure. Adults will absorb only about 10 percent of the lead to which they are exposed while children absorb approximately 50 percent. Exacerbating this is that children are in greater danger after lead has been absorbed into the body. The effect of most concern to children is on the neurologic system, and more specifically the developing brain. Mild to moderate exposure to lead can cause long term cognitive and behavioral problems including lowered IQ scores, developmental delays, reading skills deficits, aggression, withdrawal, impulsivity, and learning disabilities in young children (Nursing Care of Children and Infants).

Of course there are other environmental risks that some children face every day. Secondhand tobacco smoke, which increases the risk of adverse health events such as lower respiratory infections may be the most commonly discussed in the media. However, middle ear disease, SIDS, and the development and exacerbation of asthma are also significant environmental concerns (Federal Interagency Forum on Child and Family Statistics, 2007).

It is clear that a clean environment where children are free to explore without the risk of exposure will reduce the risk of adverse health events. While designing the survey for CCHAPS, it may be helpful to include age of the housing in which children are living, the amount of

secondhand tobacco smoke to which children are exposed, and blood lead levels. For the six-county service area there are very few cases of children with elevated blood lead levels. How many children were tested for lead levels and how many are at risk is unknown. What is known is that children who are not white and children who live in poverty are at greatest risk (Family Interagency Forum on Child and Family Statistics, 2007).

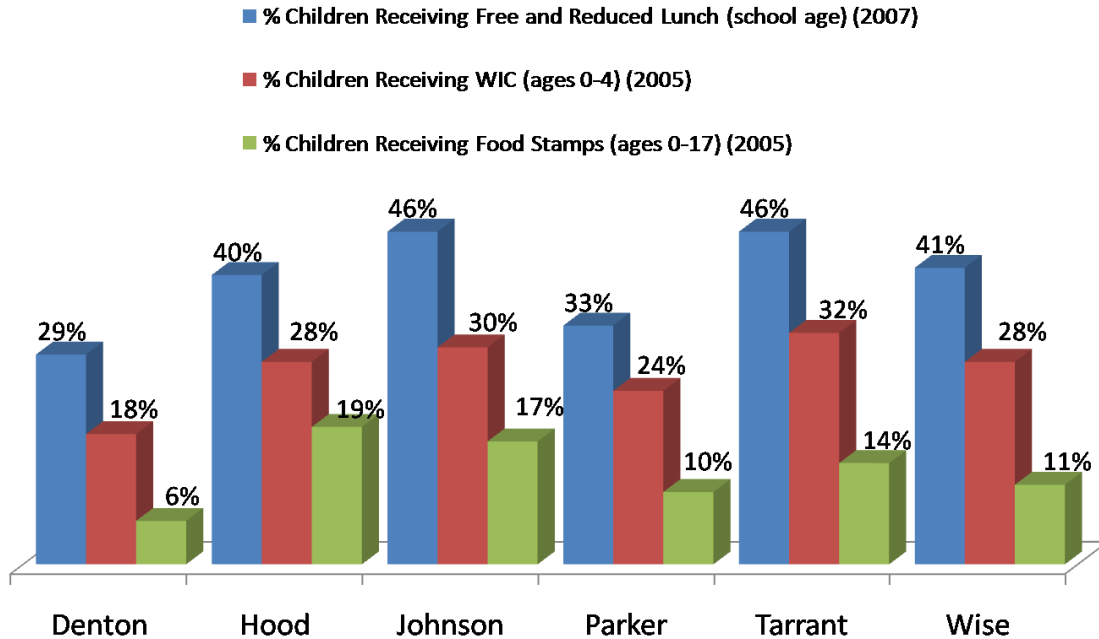
Other

We have presented data about the health of children in a six-county area from the perspectives of infectious, acute and chronic diseases, as well as influences of the environment. There are other more general considerations as well, however. The food available to children, the environment in which they live, how much and the types of physical activity to which they have access can all influence the growth, development and overall health of children.

The old cliché “you are what you eat” may be most applicable to children. What children eat affects how they grow, their concentration, sleep, and behavior. Large numbers of children in the Cook Children’s service area receive free or reduced lunch at school and many children under four years old receive food assistance through the Women, Infants, and Children Program. Figure 3 below is a representation of the children in the service region receiving some type of food assistance. Other information not available, but pertinent to a comprehensive assessment of child health would be around nutritional habits of children, and physical activities both in terms of amount and types of activities (games versus television, solo versus group activities, etc.) This kind of information would be useful to gather through household surveys.

Figure 3

Children Receiving Food Assistance (Annie E. Casey Foundation)



Oral Health

At the Children's Health Data Exchange there were several requests for children's data on oral health. Our research efforts were largely unsuccessful in obtaining data on the oral health status of children in the region. At the state level, and nationally, there is a well-documented lack of dentists and an impending crisis in dental care as many dentists reach retirement age in the next few years. The current lack of dentists is particularly acute among dentists providing treatment to Medicaid covered patients. The nation's goal for dental treatment for low-income youth is 66 percent. In 2004, the nation was not even to half of this goal at 31 percent (*Healthy People 2010*). In Tarrant County, approximately 75 percent of parents reported that their children had a dental visit in 2005 (United Way of Tarrant County, 2005). This number may not be representative of the overall population when considering that there are just over 600 dentists that practice in Tarrant County (Texas Department of State Health Services) and only 31.1 percent of children in the public health region of Cook Children's Health System on the Texas Dental Health Steps Program in 2006 receive at least one dental check up (Texas Department of State Health Services, Dental Statewide Report). The Federal Interagency Forum on Child and Family Statistics reports that dental caries is the single most common disease during childhood. The data available on the oral health of children leaves much to be desired

and lends itself to the frustration of the requestors of data about the oral health of children at the Children's Health Data Exchange.

Emotional and Mental Health

Good mental and emotional health is essential to proper growth and development during childhood. A sense of well-being can assist with attaining satisfying social relationships with family and peers as well as success in school and the workplace. Emotional and behavioral difficulties can lead to lifelong disability. Normally a parent is the first to recognize a mental or emotional health problem, and their reports of such issues are crucial to the success of their children in overcoming and dealing with mental health issues as well as obtaining appropriate referrals to mental health services (Federal Interagency Forum on Child and Family Statistics).

In the U.S., almost five percent of children were reported by their parents to have serious difficulties with emotions, concentration, behavior, or difficulties getting along with other people (Federal Interagency Forum on Child and Family Statistics). In Tarrant County alone, over 50,000 children have mental illness, and another 85,000 are at risk of having a mental illness (Texas Department of Mental Health and Mental Retardation). In 2003, the National Health Interview Survey reported that 43.4 percent of the children in Texas that have current emotional, behavioral, or developmental problems did not receive required mental treatment or counseling. Further data is necessary to determine the mental and emotional health needs of children in the six-county service area.

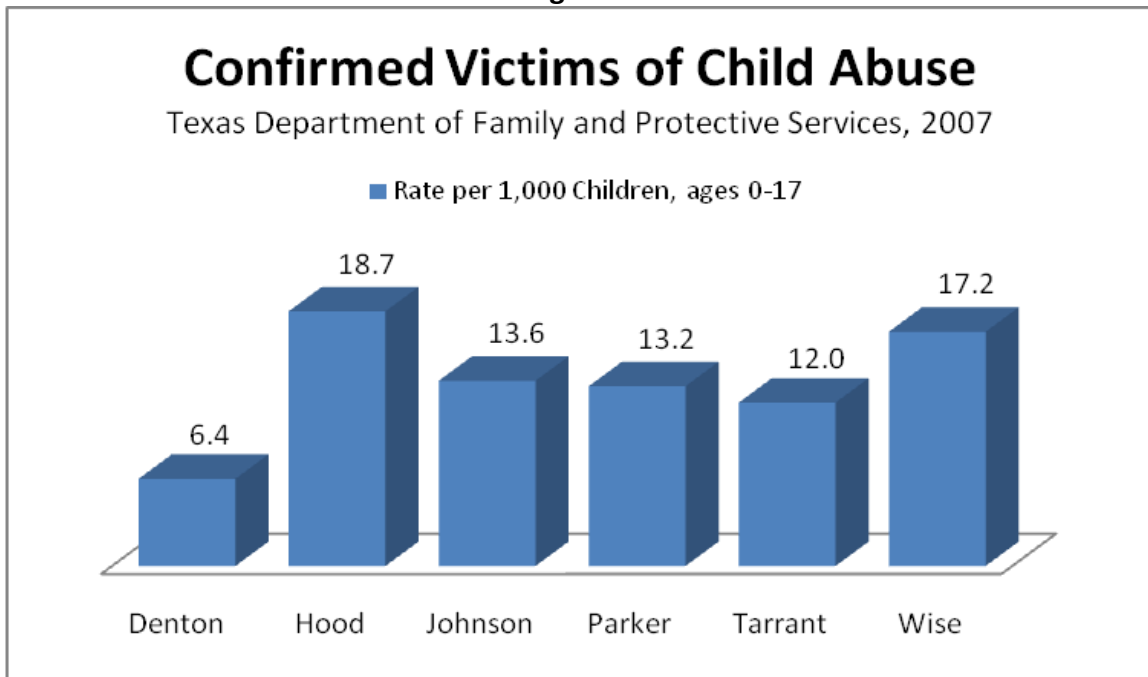
Safety

Unintentional injuries are the leading cause of death in children between 1 and 14 years of age. Some of the leading causes of injury that end in a visit to the emergency department include falls, being struck by or against an object, natural or environmental causes of injury, being cut or pierced by an object, poisoning, drowning and near drowning, and motor vehicle traffic accidents. Of all of the emergent visits to hospitals, only 1-2 percent of initial visits end in hospitalization (Federal Interagency Forum on Child and Family Statistics). Leading causes of unintentional injury deaths vary by age; the top causes of unintentional injury deaths are airway obstruction in children under age 1, drowning in children ages 1-4, and motor vehicle accidents for children ages 5-14 (Safe Kids Worldwide).

Protecting children is an important step in ensuring a healthy future. Ensuring safety for children can mean several things. Of course child restraints, parent education, and other preventive measures will attribute to the safety of children. The Texas Department of State Health Services has reported that 85 percent of child deaths attributed to injury could have been prevented. Understanding the hazards that surround children will assist Cook Children's and other key organizations in determining how to keep the children within the service area safe.

Abuse of any kind, including neglect, is associated with negative outcomes such as reduced achievement in school, juvenile delinquency, substance abuse, and mental health problems. Some negative effects such as physical, social, emotional, and death are long-term. Younger children are more often victims than older children, more girls are abused than boys, and children in lower-income families have higher rates of abuse than their counterparts with higher income levels. (Federal Interagency Forum on Child and Family Statistics) Figure 4 presents confirmed incidents of child abuse by county for 2007.

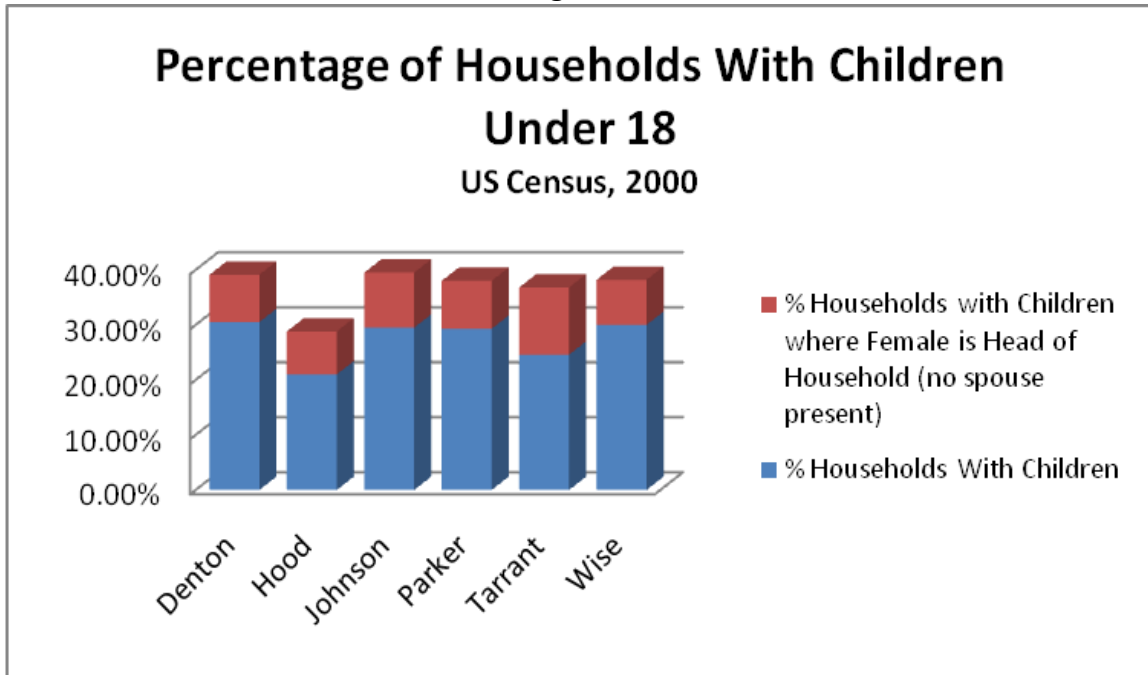
Figure 4



Family Health and Activities

Children live in all kinds of environments including homeless shelters, foster homes, single-parent families, grandparents as guardians, married families, and sometimes a combination of any of the above is where a child can call home in a single year. In the Cook Children's service region the average family size is just over three. In Fort Worth alone, 59,000 children are living in single-parent families and 49,000 thousand children are living in households where the head of the house is a high school drop out (Annie E. Casey Foundation). Figure 5 presents a comparison of households with children to households with children and with a female head of household by county. The significance of these numbers cannot be ignored as many single parents do not earn enough to supply basic needs for their families (Center for Public Policy Priorities).

Figure 5



The lack of information of soci-economic status, relationships, and living conditions of children leaves a great deal of missing information about a demographic that is constantly developing physically, mentally, socially, and emotionally. To wholistically care for children, further information such as the amount of time reading or being read to, amount of time spent participating in family activity or time spent with significant family member or relationship, time spent in front of the television or playing video games, time spent in childcare facilities, knowledge of whom children are attached to (grandparents, mother, father, childcare provider), and the amount of community the child experiences may assist in explaining the degree of health children are experiencing. It is well known that children who are read to perform better in school, that children who form multiple long term bonds may develop with more stability, and that the family is the center of the child's focus for support, growth, and social function.

Health Insurance and Access to Care

Having health insurance coverage, regardless of the type or source of that insurance, has become a key indicator in child health. It is one way of predicting whether or not a child has a regular and ongoing accessible source of health services. The type of insurance coverage varies by age, with younger children having a higher rate of a public source of insurance and older children having a higher rate of a private source of insurance. Older children, however, are more likely to lack a usual source of health care. Insurance coverage also varies by race, with Whites having a higher coverage rate, followed by African American children and then Hispanic

children with a 14 percent gap in the U.S. between Whites and Hispanics in 2005 (Federal Interagency Forum on Child and Family Statistics).

One of our nation's goals is that 97 percent of our children would have an ongoing source of health care; that is a particular source where a child can go for preventive and sick care as needed (this does not include the emergency department) (*Healthy People 2010*). One solution that has been greatly discussed is public insurance of all children; unfortunately health insurance does not always equal access as four percent of our nation's children insured through Medicaid in 2005 did not have an ongoing source of care (Federal Interagency Forum on Child and Family Statistics). Physicians still have choices about whom they will see and many base those decisions on reimbursement.

There were approximately 1.5 million Texan children uninsured in 2007 (Henry J. Kaiser Family Foundation). 139,880 children in the six-county region were covered by Medicaid and 44,952 were covered by CHIP in September 2008 (Texas Health and Human Services Commission). The most recent data on the overall insured status of children in the six counties in this report dates to the 2000 Census. Many changes have taken place in the Texas Children's Health Insurance Program, in the demographics of the counties, and in the availability of care. New primary data is required to better describe and inform Cook Children's of the situation within their service area.

SUMMARY OF GAPS IN EXISTING DATA

It is unfortunate after many, many hours of work that there is still very little to report that is not found on the national level. This strongly validates the contribution the CCHAPS project will make to our knowledge about this 11 percent of the Texas children's population and to our potential to learn about children residing throughout the state and ultimately the nation. The gaps are numerous and exist in every aspect of health pertaining to the developmental, mental, and physical needs of children. The needs of children are different than those of adults, and it is the goal of Cook Children's to provide community-wide resources and health information for the children they serve. This is ambitious as the area is wide, the population is diverse, the needs are mostly unknown, and the cost is great.

Supplemental Tables and Data Template

Starting from the beginning of the template, gaps in available information are evident. For example, from the first section of the demographics portion of the template, there is data missing such as how many children were born outside the U.S. and how many children live in immigrant families, as well as how many children in the service area speak English as a second language or no English at all. In each section of the data template, there are obvious gaps within indicators and between counties.

The information provided in the data template can be used to interpret other data found during the health assessment. After identifying the most useful information within the template, the gaps can systematically be determined. For instance, using demographics, insurance coverage rates and types, and the number of physicians (and what types of insurance they accept) available to serve children in an area can help to determine how many children do not or cannot have an ongoing source of care. This information not only provides a picture of what is happening - it also helps to solve the problem. For example, if there are enough providers in an area to serve children, but children lack health insurance coverage, this would provide an indication of where to start developing solutions; the starting place would be different if there were not enough physicians and all of the children were insured.

As in the example above, there are many ways to utilize this data. This report is written in hopes that data is collected and turned into information that not only clearly describes a problem, but also points to possible solutions. The data cannot be used individually; they must be combined into useful information.

As can be seen here, what wants to be known is more than what is known. Further information is needed about the one rural county, Wise, where data is scarce and further information is needed in the most urbanized county, Tarrant, where the population is dense. A quote by Gabriela Mistral reminds us of the reason this assessment is being done, and it may help reinforce what all of this is about: "Many things we need can wait, the child cannot. Now is the time his bones are formed, his mind developed. To him, we cannot say tomorrow, his name is today" (Mental Health Connection of Tarrant County).

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