Executive Summary

COMPREHENSIVE CHILD HEALTH PLAN: 2000-2005

Task Force Report
to the
North Carolina Department of Health and Human Services

North Carolina Institute of Medicine

May 23, 2000

BACKGROUND

In the Spring of 1999, the Secretary of the North Carolina Department of Health and Human Services (DHHS), the Honorable H. David Bruton, M.D., asked the North Carolina Institute of Medicine to convene a statewide task force to assist the DHHS in formulating a comprehensive child health plan to ensure that all children reached their maximum health potential. The Institute was asked to:

- Identify and/or set measurable health status goals for North Carolina children;
- Determine how well North Carolina's children already meet these goals, and identify areas that lack data for measuring child health status in our state;
- Identify existing services and programs available to enhance children's health (and determine the extent to which target populations use these services);
- Identify the extent of unmet health and health care needs of children in North Carolina.

The goal of the NCIOM Comprehensive Child Health Task Force is to ensure that all our children reach their maximum health and development potential

The North Carolina Institute of Medicine asked Samuel L. Katz, MD, Wilburt Cornell Davison Professor of Pediatrics and Chair *Emeritus* of Pediatrics at the Duke University Medical Center, and Dean E. Smith, former Men's Head Basketball Coach at the University of North Carolina at Chapel Hill to serve as Co-Chairs of the Task Force. The Task Force was appointed in the summer of 1999 and included 37 members from around the state, representing health and educational professionals, child advocates, and other concerned citizens. The Task Force began meeting in July 1999, and held monthly meetings thereafter until May 2000.

The Task Force members were divided into six work groups: Healthy Pregnancies & Healthy Newborns (Chaired by Robert Dillard, MD, Professor of Pediatrics, Wake Forest University School of Medicine); Chronic Illness & Developmental Disabilities (Chaired by Olson Huff, MD, private practice pediatrician from Asheville); Acute Illness & Infectious Diseases (Chaired by David T. Tayloe, Jr., MD, private practice pediatrician from Goldsboro); Child Mortality & Injury (Chaired by Marcia Herman-Giddens, PA, DrPH, child maltreatment consultant); Mental Health & Substance Abuse (Chaired by Beth Melcher, PhD, Executive Director, National Alliance for the Mentally Ill – North Carolina); and Health Promotion & Disease Prevention (Chaired by Jan Dodds, EdD, RD, Department of Nutrition, UNC-CH School of Public Health). Staff from the Institute of Medicine and from the North Carolina Department of Health and Human Services assisted each work group.

THE IMPORTANCE OF CHILD HEALTH

There are few "natural resources" as important as our children to the future of our state and nation. The investments we make in the health of children can have tremendous payoffs in terms of the health and vitality of these young people as they mature into adulthood and become the backbone of our state's economy and the leaders of the future. Thus, our investment in their early development is critical. We must provide them with access to regular health care, and assure our responsiveness to their acute, developmental, chronic, and mental health conditions. We must also give children opportunities to learn healthful living habits and skills.

Investments in our children's health will have tremendous payoffs in the health and vitality of these children as they mature into adulthood

The "good news" is that the majority of our state's children do in fact mature into reasonably healthy adults, obtain a solid education and employment, and become steady wage earners, tax payers, and productive citizens of our state. Yet, there are substantial numbers of infants, young children, and adolescents in our state who appear to be "left behind." For too many North Carolina children,

the promise of a healthy adulthood is still a dream with little chance of reality. Many of these children grow up with identifiable disadvantages or at risk of developmental, health, or achievement problems; they are in need of special attention and resources, support, and/or opportunities that can mean the difference between a healthy and successful adult life and the prospects of ill health or other untoward outcomes. Planning for the future of our state must include careful consideration of the way we allocate scarce resources (both public and private) specifically to the care and protection of our children and youth.

13% of NC children are at high-risk for poor health outcomes

The Anne E. Casey Foundation of Baltimore, Maryland recently identified six conditions that can influence family fragility and children's prospects for good health outcomes: 1) the absence of a parent, 2) parent educational level, 3) family poverty status, 4) parent employment status, 5) welfare assistance, and 6) health insurance coverage.[1] From this important national study we learn that surprisingly large numbers of North Carolina's children have one or more of these risk factors. For example, in 1996, nearly 30% of North Carolina children were not living with two parents. Almost one of every five children (19%) in the state was living in poverty, despite North Carolina's booming economy. Nearly 26% of North Carolina's children were in households where no parent has a full-time, year-round job. Twenty-seven percent of North Carolina's children were in households supported by public assistance (e.g., welfare or Supplemental Security Income), and 15% of children lacked health insurance coverage. In all, the Casey Foundation found that 13% of North Carolina's children were at "high risk,"—living in families with four or more of these risk factors.

While any one of these risk factors can be serious enough, the combination of two or more of the factors and their multiplicative effects can be devastating to these families, but especially to young children who need the security and stimulation that a supportive home, school, and health care environment can offer. The Task Force has addressed these aspects of childhood in our state over its nine months of diligent work. The recommendations offered in this report are motivated by a concern for the cumulative effects of these home and community risk factors.

THE STATE OF CHILD HEALTH IN NORTH CAROLINA

NC has made great progress in some areas of child health

North Carolina has made great progress in certain areas of child health. For example, North Carolina's infant mortality rate has steadily decreased, although the decrease has been greater for white infants than African-Americans. In the last ten years, the rate has declined from 12.6 deaths per 1,000 live births in 1988 to 9.2 per 1,000 in 1998. The overall child death rate in North Carolina has also declined during the same time period, from 120.6 deaths per 100,000 children under the age of 18 to 89.5 deaths per 100,000. While progress has been made in these areas, North Carolina is still above the national average in infant and child deaths and there are still large disparities in health status by racial/ethnic groups and socio-economic levels.

One area where North Carolina excels is in the number of children immunized. Eighty-four percent of two-year-old children are protected by the recommended vaccines, compared to only 80.6% nationally. Similarly, North Carolina youth are less likely to drink alcohol or engage in risky drug behaviors than their national counterparts.

The state also has many programs of which to be proud. North Carolina has strong screening and early identification programs. Over the last ten years, we

have instituted programs to screen newborns for a variety of metabolic disorders and young children for hearing and vision loss. North Carolina also screens children for elevated blood-lead levels, provides dental screenings to all children in public schools in kindergarten and fifth grade, and has recently implemented an asthma screening program among seventh and eighth graders. Our focus on early childhood initiatives through the North Carolina Partnership for Young Children (North Carolina Smart Start) focuses community efforts on ensuring that every child enters school ready to learn. North Carolina also offers many other excellent health, social services, and educational programs for children. In fact, North Carolina recently received national recognition for having done the best job of expanding health insurance coverage to uninsured children through Medicaid and NC Health Choice.

Despite these wonderful accomplishments, the Task Force identified many outstanding problems. North Carolina has the third highest rate of infant mortality in the country (9.2 deaths per 1,000 live births). More than 5,000 babies are born with very low birth weights. The incidence of low and very low birth weight births and infant deaths are greater among minorities, and rates of infant mortality among minorities have been increasing in recent years. North Carolina's teen birth rate exceeds the national average, as does the number of women who smoke during pregnancy. Additionally, while North Carolina has a higher than average childhood immunization rate, the rate is still below the Healthy People 2010 goals of ensuring that 90% of children under the age of two receive recommended immunizations.

More than 100,000 children are born each year in North Carolina. Even though the numbers of children affected by serious health conditions are small, about 20% of North Carolina children and youth are classified as having a "special health care need"—a chronic physical, developmental, behavioral, or emotional condition that requires health and related services beyond a type or amount normally needed. For example, 3.4% of children are estimated to have a serious chronic condition and 11.9% have functional limitations.

Approximately 20% of NC's children have a special health care need

With regard to mental health and substance abuse problems, the state estimates that between 10 and 12% of children (170,000-208,000) have serious emotional disturbances. One of ten high school students in North Carolina self-reports drinking alcohol at what would be considered a "heavy" level, and almost one of four high school students reports engaging in "risky" drug use. These children are more likely to have a number of risk factors, such as living in poverty, a parental history of legal or other social problems, parents with lower educational levels, or a home environment with a history of violence.

About 200,000 children have serious emotional disturbances, and 10-25% of NC adolescents engage in high risk behaviors

A major concern of the Task Force was the extent to which children in this state have available a familiar, reliable, regular source of health care. Children should have access to health care providers who are family-centered, and offer comprehensive, coordinated, compassionate, and culturally competent care. Although solid data are not clearly available on this point for North Carolina specifically, national estimates are that as many as 6% of children have no regular source of health care that meets these requirements. Minority children are far less likely to have a regular source of health care. Problems with access to a regular source of health care are even more extreme for the state's adolescent population, and are particularly problematic for children who need mental health or substance abuse services. For these reasons, it is important to explore the availability of school-based or -linked health centers as an alternative to more traditional health care services for adolescents and youth. There are only about 50 of these health centers in the state. In addition, North Carolina has

too few school nurses, with an average of one nurse to 2,480 students statewide. The national recommended ratio is one school nurse for every 750 students. North Carolina schools also lack the personnel to identify and treat children with mental health or substance abuse problems.

Previous analyses published by the North Carolina Institute of Medicine have shown that access to primary dental care for children, especially those from low-income families, is a major problem in this state. Approximately 25% of all children enter kindergarten each year with untreated dental decay. Early childhood dental decay is more prevalent in low-income and rural populations.

More than 225,000 children in the state continue are uninsured, despite the implementation of NC Health Choice

The Task Force also identified access barriers to health care for racial and ethnic minorities, especially persons of Hispanic/Latino origin. Hispanic/Latino populations have experienced health access barriers because too few health care providers speak Spanish and/or are educated to be culturally sensitive to their health care practices and needs. Similar cultural and/or language barriers exist for other racial and ethnic minorities.

Lack of insurance coverage makes it more difficult to obtain needed health services. While North Carolina has done a wonderful job expanding coverage to uninsured children through the implementation of NC Health Choice and the outreach efforts to enroll eligible children into Medicaid—many children remain uninsured. In 1999, there were 225,969 uninsured children (11.5% of all children from birth through age 18). Of these, 119,081 are currently eligible for either Medicaid or NC Health Choice (with family incomes less than 200% of the federal poverty guidelines). Another 63,763 uninsured children have family incomes between 200-300% of the federal poverty guidelines, and 43,125 uninsured children have higher family incomes.

NC has higher childhood injury rates than the national average

Illnesses and disabling conditions were not the only health problems that the Task Force examined. Injuries and accidents among children and adolescents accounted for 672 deaths of children younger than age 18 in 1998, which reflects a rate of childhood mortality greater than the national average and the national health goals for the year 2010. National estimates suggest that for every childhood death caused by injuries, there are 37 hospitalizations, 1,000 emergency department visits, and many more visits to private physicians or school nurses. In North Carolina, there are on average 25,000 children who are injured in motor vehicle crashes. Almost 11,000 children injured in high-school sports annually, and more than 29,000 teens graduating from high school will have been injured on the job sometime during their lives. Approximately 5,000 children were admitted to a hospital because of injuries in 1998. In addition, in State FY1999, there were 37,326 children who were substantiated victims of child abuse or neglect. Task Force members were particularly alarmed to learn that despite all the state's past work in addressing this problem, the number of children who are subject to abuse and neglect continues to grow. National studies also suggest that the actual incidence of abuse and neglect might be much higher than what is reported to county departments of social services.

Additionally, a child's socioeconomic status has an impact on health. Approximately 391,000 children under the age of 18 in North Carolina are estimated to live in poverty; add to that the realization that as many as 8% of households are unable to meet their nutritional needs, and 2.6% are classified as "hungry." Poor and minority children die at 2-3 times the rate of non-poor. The conditions associated with poverty also have deleterious effects on children growing up in these households, affecting their overall physical and emotional health, and diminishing their ability to perform in school and other settings.

NC school-age children are physically inactive and in poor cardiovascular shape

Lifestyle behaviors learned in childhood can have a profound influence on a child's health, both during childhood and in later life. It is perhaps in this area, that the state is lagging the farthest behind. Population surveys across the nation reveal that North Carolina's population is one of the most sedentary, with only 55% of North Carolina's public school students reporting participation in vigorous physical activity for 20 or more minutes on three days per week. Consequently, North Carolina students scored 12-15% below the national average in heart-lung fitness tests. North Carolina's children are two or three times more likely to be obese than children nationally. North Carolina has one of the highest smoking prevalence rate in the nation (26%), with one of every five deaths in the state resulting from exposure to tobacco. Ninety percent of these smokers began smoking before the age of 18. A 1997 statewide survey found that 18.4% of middle school students and 38.3% of high school students are current users of tobacco products. Despite these well-known facts, the state does too little to model and teach healthy living behaviors among our youth.

One of the most important ways to improve children's health is to improve their lifestyle behaviors

ADDRESSING THE PROBLEMS OF CHILD HEALTH IN NORTH CAROLINA: THE PROSPECTS FOR MEASURABLE IMPACT

All of these findings provide motivation for renewed efforts to address the health and fitness issues associated with the child and adolescent population of our state. The Task Force worked tirelessly to document the extent of these problems and their distribution among population subgroups, and to understand the available evidence on what interventions seemed to work more effectively in addressing each set of problems. The problems of child health are generally found to be inseparable from those of poverty, race, learned health behaviors, and access to health services; and they are exacerbated by the lack of insurance and the inadequate provision of school-based health education and clinical services to children and youth. Most of the problems are within our capacity to address effectively. Many will require the creative and determined coordination of both public and private resources and programs.

The report that follows is a distillation of the Task Force findings and recommendations; we hope the recommendations can provide the structure for subsequent efforts to address these problems in the first few years of the new century. In this report many existing programs to address these problems of child and adolescent health are described, along with assessments of what is known about the apparent effectiveness of these efforts. One cannot help being impressed by the range of programs, services, professional sources of assistance and support, and general concern for the health and welfare of the children of our state. Yet, there is inescapable evidence that many of these efforts have simply not succeeded by any standard widely accepted in the field of child health. North Carolina, despite its efforts, ranks behind most other states in many of the critical indicators of child health.

Rather than despair, we offer hope—the hope that this report will inspire us to make greater efforts to improve child health in our state. Moreover, we hope this report will help to identify those opportunities where substantial impact can be expected through the strategic investment of resources and the targeting of program, professional, and lay efforts.

RECOMMENDATIONS

The Task Force recognizes that North Carolina already has many effective programs to protect and improve child health. The fact that these programs are not highlighted in these recommendations is not intended to undercut the continuing need for support of these efforts. The Task force identified a series of policy options to help North Carolina children reach their maximum health potential. These options were prioritized based on: (1) the severity of the problem or issue being addressed; (2) the number of children affected by the problem; and (3) the availability of cost-effective interventions or programs to address the problem or issue in question. The Task Force developed a five-year plan to implement these child health priority recommendations. The Task Force urges that its top ten recommendations be implemented immediately. The other priority recommendations were grouped into those that should be implemented within three years, and those that should be implemented within five years. Some of these recommendations require the initiation of new efforts or programs, others require the expansion of existing programs, while others require some effort to develop new systems or plans.

The recommendations are organized around three cross-cutting areas that impact children's health and the ability of the state to measure and monitor children's health: (1) Health education for children and families; (2) Access to a comprehensive system of care; and (3) Comprehensive data system to inform decision making.

It is our hope that the organization and summarization of the key findings from the Task Force in this way will make the report a more useful blueprint for policy deliberations and positive action in behalf of child health in our state.

Highest priorities that should be implemented immediately

The following is a list of the top ten recommendations of the Task Force. Each of these recommendations has equal weight, that is to say, that the 10th recommendation is of equal importance to the first recommendation.

Health education for children and families

The NC State Board of Education should expand the mandatory school health curriculum and ensure it is being taught

North Carolina should take a proactive approach to improving child health. To the extent possible, the Task Force recommended steps to prevent disease and disability among the state's children. Health promotion and disease prevention efforts, including health education targeted at children, their parents and the general public, became one of the cornerstones of the Task Force's recommendations.

1. **The North Carolina State Board of Education and Department of Public Instruction should expand the mandatory school-health curriculum to increase the time students actively participate in physical education, and enhance the health education curriculum to include more comprehensive education in injury and violence prevention, personal safety, nutrition education, tobacco and drug use prevention, behavioral risk management, media literacy and parenting skills. The State Board of Education should monitor each school system to ensure that the curriculum is being taught and that children in the school understand and adopt these healthful living behaviors.**

The Task Force recognized the importance of teaching children healthful living behaviors while still in their formative years. It is for this reason that the Task

Force emphasized the need to improve the existing mandatory school-health curriculum. The State Board of Education already mandates that schools teach the "Healthful Living" curriculum. This curriculum includes physical education, classroom time devoted to nutrition, injury prevention, drug education, and sex education, as well as skills training in areas such as conflict resolution, stress management, media literacy and personal safety. The curriculum is supposed to be taught in elementary and middle school, with some additional training at the high school level. However, implementation of this curriculum is not monitored at the state level, and schools are not currently held accountable to ensure that students understand or implement healthful living skills.

The Task Force recommended that the State Board of Education enhance the "Healthful Living" curriculum to include additional training on injury prevention, nutrition education, tobacco and drug-use prevention, personal safety and parenting skills. The State Board of Education should monitor each school system to ensure that the curriculum is being taught and that children in the school understand and adopt healthful living behaviors. The Task Force maintains that children stand a better chance of internalizing healthful living behaviors if these skills are taught throughout the child's school years, are modeled by school staff, and emphasized through general public education efforts.

Implementing a comprehensive school health curriculum is part of the overall goal of implementing "coordinated school health programs" in North Carolina schools. Coordinated school health programs represent a more coordinated, multi-component approach to enhance the well-being of children in school settings. Coordinated school health programs include eight components: health education, physical education, health services, nutrition services, health promotion for school staff, counseling and psychological services, a healthy school environment, and parent/community involvement. The Task Force considers coordinated school health programs to be the best and most appropriate approach to help schools achieve these health enhancement goals for the children of North Carolina.

NC should engage in a comprehensive public education campaign to teach the importance of healthful living

2. **The North Carolina General Assembly should appropriate funds to the North Carolina Department of Health and Human Services for a general public awareness campaign to increase understanding of the benefits of healthful living. The public awareness campaign should be targeted to children, parents and communities.**

Educational efforts targeted at children and their parents stand a better chance of success if coupled with mass media campaigns that promote healthful living behaviors and counter negative advertising and media messages. Mass media should be used to promote public awareness of good nutrition, the importance of physical activity, reduction of tobacco and drug use, preventing injuries, reducing sexual behaviors that result in STD, HIV and unintended pregnancies, and to otherwise raise individual, family and community motivation for healthful living. Mass media campaigns should also be developed to promote help-seeking behaviors and improve children's self image and esteem. Evidence shows that these mass media campaigns can be successful in improving healthy behaviors—for example, in reducing smoking, increasing the consumption of nutritious foods, and increasing seat belt use.

NC should expand the intensive home visiting program statewide

3. The North Carolina General Assembly should appropriate additional funds to expand the intensive home visiting program statewide. This is a primary prevention program aimed at improving parents' life course development, parenting skills, child health and development, and parents' use of human services, among low-income, first-time mothers.

The intensive home visiting program is a highly effective preventive health program that provides parenting education and services to first-time mothers living in poverty. Currently, there are 23 programs in operation using one of three models, and seven communities are in the planning stages of implementation. Past longitudinal evaluations of similar programs show that it helps reduce the incidence of child abuse and neglect, injuries and poison ingestion. The program has also been effective in helping mothers defer subsequent pregnancies and move into the workforce.

Access to a comprehensive system of care

NC should ensure that all uninsured children have access to health insurance coverage

Children should be able to access a comprehensive system of care to identify potential health problems and address ongoing health concerns. This is in keeping with the Task Force's overall goals of preventing the development of adverse health conditions (primary prevention) or mitigating the effects of existing health concerns (secondary and tertiary prevention).

4. The North Carolina General Assembly should ensure that all uninsured children have access to health insurance coverage. To accomplish the goal of ensuring that all children have access to health insurance coverage requires three steps:

- **The North Carolina Department of Health and Human Services should expand outreach efforts to ensure that children who are currently eligible are enrolled in Medicaid or NC Health Choice.**

In the first year, NC Health Choice enrolled almost 57,000 uninsured children. However, there are still more than 119,000 uninsured children with incomes below 200% of the federal poverty guidelines that could qualify for either Medicaid or NC Health Choice. The state should expand its outreach efforts to ensure that all families know about the eligibility requirements for these programs. In addition, parents need to understand the importance of establishing an ongoing relationship with a health care provider and of seeking well-child as well as acute care services.

- **The North Carolina General Assembly should eliminate the two-month waiting period to enroll in NC Health Choice for children with special health needs.**

One barrier that prevents some eligible children from enrolling in NC Health Choice is the two-month waiting period. Under existing law, children must be uninsured for at least two months before becoming eligible for NC Health Choice. Families and advocates report that this requirement impedes the access of children with special health needs to the program. Many families of these children have some kind of insurance (usually catastrophic insurance that is expensive, but with limited benefits) and are naturally reluctant to drop coverage for any period of time given their child's special health needs. While the concept of a waiting period to prevent "crowd out" of private insurance is acceptable in theory, it is clearly harming families with children with special needs. Since these are the most vulnerable children, every effort should be made to ensure that they

have access to NC Health Choice. DHHS and the General Assembly should eliminate the two-month waiting period for these children.

- **The North Carolina General Assembly should expand NC Health Choice to cover uninsured children with incomes up to 300% of the Federal Poverty Guidelines on a sliding-scale premium basis. Uninsured children with incomes in excess of this amount should be allowed to buy-in to the program at full cost.**

In addition to the uninsured children of low- or moderate-income families, there are approximately 64,000 uninsured children with family incomes between 200-300% of the federal poverty guidelines, and 43,000 uninsured children with higher family incomes. Indeed, one of the most common reasons for the denial of a NC Health Choice application is the fact that the family's income is somewhat above the 200% requirement. To enhance access to needed health services, eligibility for NC Health Choice should be extended to children in families with incomes up to 300% of the federal poverty guidelines with sliding scale premiums. Uninsured children with higher family incomes should be allowed to buy-in to the program at the full premium cost.

5. **The North Carolina General Assembly should appropriate additional funds to expand the number of school health nurses to assure the presence of at least one school nurse for every 750 students in North Carolina. The state should hire at least 150 additional school nurses each year until this goal is reached.**

The state should hire additional school nurses to assure the presence of at least one school nurse for every 750 students in NC

Approximately nine percent of all public school children and adolescents receive some kind of medication during school hours. Further, schools are confronted by the necessity of offering increasingly complex health services for a greater range of students with special health care needs (including tube feeding or tracheal suctioning). However, North Carolina has too few school nurses to meet the ongoing health needs of students in the public school system. North Carolina currently has an average ratio of 2,451 students per nurse, although the American School Health Association and the National Association of School Nurses recommend a ratio of 750 students per nurse. Eight of the state's 100 counties currently have ratios of 5,000 or more students per nurse; and another 23 counties have ratios between 3,001 and 4,999. Twelve counties have either no school nurses, a nurse working only "on-call," or less than half-time, for the county as a whole.

The availability of school nurses is a key component of the coordinated school health program. North Carolina needs to hire an additional 1,100 school nurses to bring North Carolina to an adequate level of school nurse personnel. The state should hire an additional 150 school nurses per year until it reaches the optimal goal of one school nurse for every 750 students.

Every child in NC should have a regular source of health care that is family-centered, coordinated, comprehensive and culturally-competent

6. **The North Carolina Department of Health and Human Services should work with the North Carolina Area Health Education Centers Program (AHEC), the four medical schools in North Carolina, the North Carolina Pediatric Society, the North Carolina Academy of Family Physicians, the North Carolina Primary Care Association, and other appropriate health professional associations to develop a plan to assure every child has access to a regular source of health care. The care should be family-centered, coordinated, comprehensive and culturally-competent. The child's health care provider should help the child access preventive, primary and specialized care.**

The Task Force recommends that every child should have access to a familiar, reliable and regular source of health care. To meet this requirement, the provider should be accessible, family-centered, comprehensive, coordinated, compassionate and culturally-competent. This provider should be the child's first point of entry through which the child can access preventive, primary, and specialized care. The clinician can be a pediatrician, family physician, nurse practitioner or physician assistant, and may be located in private practice, a public health department, a rural or migrant health center, or other organization offering continuous primary care for children. Of special importance is the effort to assure a regular source of health care for adolescents or children with special health needs, who may not have their health needs met by traditional primary care providers.

Greater emphasis should be placed on early identification of children with special health needs

7. **The North Carolina Department of Health and Human Services should expand early identification, referral and treatment of children ages birth-to-five. The expansion should focus on, but not be limited to, identification, referral and treatment of young children needing mental health services or who have parents with substance abuse problems.**

Although early intervention services for infants and toddlers are available and required in all 100 counties, the statewide penetration of services to this population is below expectations. Some experts suggest that 8-13% of birth-through-two-year olds would be eligible for the Infant-Toddler program, but the state only serves 2.1% of children in this age group. Similarly, for three-to-five year olds, the state serves 5.24%, while the expected penetration rate is 5-8%. A particular problem identified by the Task Force was identification and treatment of children with mental health problems or those impacted by parental substance abuse problems. More concerted efforts are needed to identify children in need of these services through hospitals, community well-child visits, child service coordination, DSS, day care and preschool settings.

State policies should ensure that mental health and substance abuse services are available to Medicaid-eligible children

8. **The Division of Medical Assistance should work with the Division of Mental Health, Developmental Disabilities and Substance Abuse Services and other appropriate agencies and professional organizations to develop and implement Medicaid policies aimed at expanding the availability of mental health and substance abuse services for children. The policy review should examine service definitions, payment rates, consumer choice, a review of local penetration rates and the implementation of a consistent service model across the state.**

Current state Medicaid policy limits choice of mental health providers favoring staff in area mental health, developmental disability or substance abuse programs to that of similarly qualified staff in private practice. In addition, Medicaid's cost-finding process, which establishes reimbursement rates, has

created a financial crisis for some of the area mental health programs, which limits their ability to provide services to other, non-insured or inadequately insured children. The Division of Medical Assistance with the Division of MH/DD/SAS should review their policies to expand mental health and substance abuse services for children.

9. **The North Carolina Department of Health and Human Services should establish mandatory case load limits for child protective service, foster care and adoption workers. The caseload maximums should not be exceeded even if cases increase. The state should share with the counties the cost of hiring additional social workers as caseloads increase.**

The state should set mandatory case load standards for child protective service, foster care and adoption assistance workers

One of the most pressing issues facing the North Carolina children is the growing number of children who are victims of child abuse and neglect. In SFY 1999, there were 37,326 children who were substantiated to have been victims of abuse and neglect, which is a 25% increase in the last four years. The state Child Protective Services system was set up to protect abused and neglected children. However, for the system to work, there must be adequate staff to promptly investigate allegations of abuse and neglect, and to work with families recovering from abusive situations. The state currently has a *recommended* caseload standard of one worker for 12 families for Child Protective Services investigators and case managers. These standards are appropriate, but should be changed from recommended to mandatory maximum caseload ratios. In addition, the foster care and adoptive standard of one social worker to 15 families should be changed to one social worker to 12 families. Children presently in the Foster Care system and moving to permanency with adoption or living with relatives need intensive help dealing with their own difficulties associated with separation from their biological families, adjustment to foster or adoptive placements and their own future well being.

New workers are needed to keep pace with the growing number of reports and substantiated cases of abuse and neglect. To ensure that counties can afford to hire the necessary workers, the state should share in the costs of hiring additional workers as caseloads increase.

Comprehensive data system to inform decision making

Health policy decisions should be made with the best information available to identify need, develop policy alternatives, and evaluate the effectiveness of the policy options in improving child health. Yet too often, the state is faced with addressing unmet needs without adequate information about either the nature of the problem or solutions that work.

NC should create a comprehensive child health data system to measure health outcomes and disparities as well as program effectiveness

10. **The North Carolina Department of Health and Human Services should create a state-level task force to develop a comprehensive child health data system. The goals will be to create a data system that includes assessments of the health status of North Carolina children, measures of health outcomes and disparities, and informs policy makers about the effectiveness of publicly-funded programs in improving the health status of children. Data should be compiled at a population-level, and safeguards should be established to protect the privacy of individual children and their families.**

The health data system should:

- Establish an ongoing monitoring system to measure population-based changes in health status and involvement in high-risk behaviors. Such monitoring systems should include, but not be limited to, uniform, statewide participation by school districts and individual schools in the Youth Risk Behavior Survey every two years.
- Collect demographic data, including racial, ethnic and socioeconomic data, to monitor and develop policies addressing racial, ethnic and socioeconomic disparities.
- Include mechanisms to compile and analyze universal health assessments collected at birth and kindergarten to analyze changes in population health.
- Collect data at the state-level on children who have been "screened-out" of the Child Protective Services system but who may be at high-risk of abuse, neglect or dependency.

Important Recommendations that should be Implemented within 3 years

Access to a comprehensive system of care

NC should create a funding source to pay for health care of immigrant children

- **The North Carolina General Assembly should establish a funding source to pay for the health care of immigrant children.**

Low- and moderate-income Hispanic/Latino children often face financial access barriers not experienced by other children. Some Hispanic/Latino children are ineligible for Medicaid and NC Health Choice because of the lack of citizenship. Children born in the United States are automatically citizens; yet, parents of these children who are themselves undocumented aliens might refuse to bring their children to public agencies for care out of fear of their own deportment.

Lack of health insurance coverage and the commensurate inability to afford health care services has adverse consequences both for the Hispanic/Latino children as well as other individuals living in the community. The recent outbreak of rubella among Hispanic/Latino populations is a prime example—it affects both the Hispanic/Latino community as well as other non-immigrant populations who come into contact with these children. To ensure that these children reach their maximum health potential, the state should establish a funding source to help pay for the health care needs of immigrant children.

- **The North Carolina Department of Health and Human Services should provide technical assistance to local communities to develop school-based and school-linked health centers, and the General Assembly should appropriate additional funds for this purpose.**

NC should expand the number of school-based or school-linked health centers

The state presently provides $1.5 million to support school-based or -linked health centers, but these programs exist in only 29 North Carolina counties. These approximately 50 school-based/school-linked health centers provide an accessible and user-friendly service especially to adolescents who are often without any other source of primary medical care. Many of these centers offer comprehensive services, including preventive health, primary care, and mental health services. Providing comprehensive health services in the school setting is another key component of the coordinated school health program.

The North Carolina Department of Health and Human Services should provide technical assistance to local communities wishing to establish school-based or school-linked centers. Further, the General Assembly should expand its appropriations to support the establishment of 10 new centers, and should provide funds to hire a clinical services coordinator and provide multidisciplinary training for school health providers.

- **The North Carolina General Assembly should increase funding to hire additional school-based support workers, including social workers, mental health and substance abuse professionals, and guidance counselors.**

Additional social workers, mental health and substance abuse professionals and guidance counselors are needed in the public schools

Many children who need mental health services are identified through the school system. In some communities, most children who receive mental health services obtain the services from school personnel. Yet, schools lack sufficient numbers of trained personnel to properly identify or provide services to all children in need of mental health or substance abuse services. Ensuring that schools have appropriate support personnel to meet the health needs of children is another component of the coordinated school health program.

The State Board of Education should establish minimum staffing levels for school-based support personnel (including social workers, psychologists, and counselors). The General Assembly should increase funding to hire more staff with expertise in child mental health and substance abuse to ensure that children with emotional, behavioral, mental health, substance abuse or other health needs are identified and provided appropriate services or referred to appropriate community resources.

- **The North Carolina General Assembly should appropriate additional funds to expand Child Service Coordination to cover children under age 18 with special health needs.**

Child Health Service Coordination should be expanded to cover children under age 18 with special health needs

Currently, service coordination functions are carried out by different providers under differing circumstances. For example, some private providers offer care coordination, but not all providers. Some public agencies provide care coordination (including health departments and area mental health, developmental disability and substance abuse programs), but these services do not always reach every child in need. Hospitals may also offer care coordination, but these services are generally limited to children who are inpatients. The Child Service Coordination Program is the closest to providing a comprehensive system of such services, but this program focuses only on children less than five

years of age. Other service coordination activities focus on single disease entities or a limited range of services. The lack of a true system leads to duplication of services for some children, while many (particularly older children) receive no service coordination at all. The North Carolina General Assembly should appropriate additional funds to expand Child Service Coordination to cover children under age 18 with special health needs.

Insurers and HMOs should cover mental health and substance abuse services in parity with other medical services

- **The North Carolina General Assembly should require private insurers to cover mental health or substance abuse services in parity with other medical services.**

Barriers should be removed which might prevent children from obtaining needed mental health or substance abuse services. Currently, most insurers provide less extensive coverage of mental health or substance abuse services than for other medical services. This makes it difficult for children to access needed mental health services and shifts the treatment of these children to an already overburdened public mental health system. The General Assembly should mandate coverage of mental health and substance abuse services in parity with other medical services.

Children in need of mental health or substance abuse treatment should be encouraged to obtain care. Treatment may reduce the incidence of youth suicides, school violence, behavioral problems in school, or the accidental injuries that are more common among youth who use alcohol or drugs. Our children, as well as society at large, can only benefit by increasing access to mental health and substance abuse services. In addition, the experience of the State Employees Health Plan suggest that providing managed mental health and substance abuse services in parity with other medical services is no more expensive than, and may actually lower the overall costs of health care.

The state should develop a comprehensive child nutrition plan

- **The North Carolina Department of Human Services should convene a group of experts to develop a comprehensive child nutrition plan. Ensuring that children develop healthy eating behaviors in childhood can help prevent cardiovascular disease, obesity, Type II diabetes, osteoporosis, and hypertension in children and in adulthood.**

North Carolina currently has multiple child nutrition plans, but these plans are generally targeted to a population of children served by a specific program. The Task Force recommended that the North Carolina Department of Health and Human Services convene a group of experts to develop a comprehensive child nutrition plan. The plan should promote healthful nutrition habits, and should ensure that the foods provided in child care, school and summer feeding programs are nutritious and promote the same eating habits that the state is trying to encourage the youth to adopt.

Medicaid should be expanded to cover more uninsured working parents

- **The North Carolina General Assembly should expand Medicaid to cover uninsured parents of children birth through 18 with incomes below 200% FPG.**

There are currently 137,000 uninsured working parents with incomes below 200% of the federal poverty guidelines. Providing health insurance coverage to uninsured parents will also benefit children. Studies suggest that parents are more likely to obtain health insurance coverage for their uninsured children if they also have coverage. In addition, one way to improve birth outcomes is to improve the overall health of the mother before becoming pregnant. Providing

uninsured women health insurance would enable the woman to seek necessary medical care before she conceives.

- **The North Carolina General Assembly should increase payment for dentists serving Medicaid recipients up to 80% of usual, customary and reasonable costs (UCR) for all dental procedures.**

Medicaid dental reimbursement rates should be increased to expand access to dental services for Medicaid-eligible children

Obtaining access to dental services for low-income children is very difficult in many communities. Statewide, only 20% of Medicaid recipients visited the dentist in SFY 1998. Young children were less likely to visit a dentist—only 12.2% of children ages 1-5 visited a dentist that year. One of the primary reasons for the low utilization of dental services is the difficulty Medicaid recipients face in finding a dentist willing to accept Medicaid. Because of low reimbursement rates, very few private dentists are willing to actively participate in the Medicaid program.

North Carolina is not likely to improve access to dental services without the active involvement of private dentists. However, dentists are reluctant to accept more Medicaid patients when the reimbursement rate is lower than their overhead. Therefore, to recruit more dentists to treat low-income children on Medicaid, the state should increase the dental reimbursement rate to 80% of usual, customary and reasonable charges (UCR).

- **The North Carolina Department of Health and Human Services should work with AHEC, the four medical schools in North Carolina, and appropriate organizations to expand cultural sensitivity training for health care professionals and staff to address needs of North Carolina's increasingly diverse population. The North Carolina Department of Health and Human Services should also have a system to ensure the availability of specially trained professionals who can assist individuals with limited English proficiency, when needed. The North Carolina General Assembly should provide funds to increase the number, frequency and variety of such efforts statewide.**

The state should expand opportunities for cultural sensitivity training for NC health care professionals

The US Census Bureau estimates that the number of Hispanic/Latinos in North Carolina has grown by more than 100% between 1990 and 1998, although some experts suggest that the growth has been much greater. Given that the Hispanic/Latino population of our state is increasing rapidly, and that there are social, cultural and language barriers that prevent Hispanic/Latinos as well as other population groups from benefiting from available health care, it is recommended that the state provide the support necessary for expanding the programs offering language and cultural diversity training for health care professionals in both public and private practice.

- **The North Carolina Department of Health and Human Services should work with the four medical schools in North Carolina, the North Carolina Chapter of the American College of Obstetricians and Gynecologists and other appropriate health professional associations and organizations to develop a universal health inventory to screen for risk factors for women of childbearing years.**

Women of childbearing years should be screened for risk factors that could complicate pregnancy outcomes

Prenatal care has enhanced pregnancy outcomes in many ways. However, it has not been shown to have a beneficial effect on the incidence of premature birth, a major cause of infant mortality. Prematurity is more directly related to a woman's general health, social, environmental, and emotional circumstances than the prenatal care she received. In order to reduce the incidence of

prematurity, North Carolina should address a woman's health *before* as well as during pregnancy.

The North Carolina Department of Health and Human Services should work with the four medical schools, the North Carolina Chapter of the American College of Obstetricians and Gynecologists, and other appropriate health professional associations and organizations to develop a universal health inventory for women of reproductive age. The inventory would be used to identify traditional health problems, as well as to a variety of social, environmental and emotional needs. Inventory assessments would begin in early adolescence and continue annually until menopause. Results of these inventories would be used to identify needed health services as well as link women to available resources in their communities. If properly used, women will begin their pregnancies with their health and social needs addressed. Prenatal care would be less complex for the healthy women and fewer visits for care would be needed. For women with complicated medical or social problems, prenatal care would be a part of a continuum of care that had been initiated well before conception. Under these circumstances, prenatal care would likely become more effective.

Comprehensive data system to inform decision making

NC should develop a statewide child immunization registry that covers both private and public providers

- **The North Carolina General Assembly should provide funding to the North Carolina Department of Health and Human Services for system development, implementation and continuing maintenance of a statewide child immunization registry.**

With a very mobile society and frequent changes in health care coverage, parents often take their children to different providers over the course of the child's primary vaccination series. Nationally, as many as 25% of children visit at least two providers for immunizations before their third birthdays. Fragmented health care translates into fragmented immunization records. Without a complete immunization record, it is difficult for a provider to determine immunization status of a two-year-old child who presents for an acute illness or well-child visit. Hence, opportunities for immunizing this child might be lost, or the child could be over-immunized, unless the parent maintains and carries a complete and up-to-date immunization record for the child, which few do. Overall, 21% of children were over-immunized for at least one vaccine, while 31% were under-immunized for at least one vaccine.

One of the strategies for assuring that every child from birth to age 19 years is protected from infectious diseases involves the establishment and maintenance of a comprehensive childhood immunization registry. Though North Carolina has implemented such a registry in all local public health departments throughout the state, this system has not been expanded to include all private sector providers of childhood immunizations. Inclusion of private providers in this system is vital to the effectiveness of the strategy because approximately 70% of immunizations are now given in the private sector.

The NC Child Fatality Task Force should be expanded to examine non-fatal injuries

- **The North Carolina General Assembly should expand the scope of the Child Fatality Task Force to examine non-fatal injuries, including injuries occurring at home, in sports activities, on playgrounds, in motor vehicles, and in the workplace.**

The state has a multi-tiered system to investigate the causes of child fatalities, and to identify gaps in systems, policies, and laws that may have contributed to

child deaths. However, the state lacks a similar system to investigate the causes of child injuries, and make recommendations on how to reduce the incidence of child injuries or minimize the severity of the injuries. The state should expand the focus of the Child Fatality Task Force to focus on the underlying causes of child injuries, and to "identify gaps in systems, policies, and laws that contribute to child injuries." In addition, this task force should monitor, study the causes and develop policies to address racial and socioeconomic disparities in fatal and non-fatal injuries.

- **The North Carolina Department of Health and Human Services should convene a group of experts and stakeholders to develop a consensus on an operational definition of "children with special health care needs" that can be used both for planning and epidemiological purposes and to identify individual children in need of specialized health care services. In addition, this group should develop a consensus on a system to measure accessibility, quality of care, and outcomes for children with special health needs. The system should focus on health status and on the progress children make with their care plans.**

NC should develop a working definition of "children with special health needs" and a system to monitor the health status of these children

Currently, there is no standardized definition of children with special health needs. Depending on the definition used, between 2% and 20% of North Carolina children meet the criteria. The lack of a clear definition of children with special health needs makes it difficult to identify children in need of specialized services and to plan programmatic initiatives. The federal Maternal and Child Health Bureau recently adopted a definition of children with special health needs, which may be appropriate for use in North Carolina. The North Carolina Department of Health and Human Services should convene a group of experts and stakeholders to review this definition for use in this state. Once a consensus is reached, the new definition can be used to identify children in need of specialized services in the NC Health Choice as well as other publicly-funded child health programs. This same group of experts and stakeholders should develop methods to monitor the quality of health care services, as well as the health outcomes of children with special health needs.

Important Recommendations that should be Implemented within 5 Years

- **The State Board of Education should ensure that by the end of five years, every NC school system has a coordinated school health program.**

At the end of five years, every NC school should have a coordinated school health program

One of the Task Force's top priorities was to ensure that every school has a coordinated school health program. By the end of the five years, the state should have all of the key components in place that are necessary for a coordinated school health program: health education, physical education, health services, nutrition services, health promotion for school staff, counseling and psychological services, a healthy school environment, and parent/community involvement. Implementing coordinated school health programs are the best method to improve children's health status and lifelong healthful living behaviors.

NC children should have access to a continuum of community-based mental health and substance abuse services

- **The North Carolina General Assembly and local county commissioners should appropriate additional funds to assure a continuum of mental health and substance abuse services. The continuum of mental health and substance abuse services should be coordinated and should involve children and their families, local medical providers, human service and juvenile justice agencies, schools and other community resources, and should include partnerships with medical centers and universities (using a "system of care" model).**

Currently, families who need services must negotiate through a complex and fragmented care delivery system. Families don't know where to obtain services and the services provided by multiple agencies or providers are not often coordinated. For the children with the most serious emotional disturbances, this leads to overuse of restrictive and costly residential care and out-of-home placements. Other children may be unable to access needed mental health or substance abuse services. However, in some communities, a new model of care is emerging—one that is coordinated and involves children and their families, local medical providers, human service and juvenile justice agencies, schools, and other community resources, and includes partnerships with medical centers and universities. Such a model can impact the outcomes of those children who are assaultive and violent, sexually aggressive and other special populations. The model is also useful for children with the full range of mental health or substance abuse problems. This "System of Care" model should be expanded statewide.

The state should study the adequacy of Medicaid provider reimbursement rates to ensure that children with special health needs can obtain needed health services

- **The North Carolina Division of Medical Assistance should study whether Medicaid provider payments are sufficient to provide adequate compensation to providers who provide comprehensive care for children with special health needs.**

In the course of our study, many providers of services for children with special physical and behavioral needs reported that reimbursement rates do not adequately reflect the additional time and effort it takes to respond to the needs of these children. Thus, there is a fiscal disincentive to serve these children appropriately. DMA should convene providers of both primary and specialized services to study this issue to determine what changes in the reimbursement system might best enhance the number of providers willing to offer efficient and effective services to children with special health care needs.

The state should ensure that child care health consultants are available statewide

- **The North Carolina General Assembly should appropriate funds to expand the child care health consultation program to provide health and safety education to child care providers, children and their families statewide.**

Since 70% of preschoolers spend some time in child care, it is critical not only that child care providers be trained in health and safety, but also that the child care setting be used as a venue to provide health/safety education to children and families. The introduction of child care health consultants (primarily specially-trained nurses) who can work directly in such settings has begun to meet both objectives. These professionals provide training and consultation to child care providers to enhance the safety of the child care environment. In addition, they offer ways for these providers to both model and teach good health care behaviors to children and their families. Approximately half the state currently has this consultation service (largely through Smart Start funding). The General

Assembly should appropriate sufficient funds to ensure statewide implementation of the child care health consultation program.

In addition to these priority recommendations, the full Task Force report includes many other recommendations that are worthy of consideration. These recommendations are included in the chapters that address specific child health issues.

- **The North Carolina Department of Health and Human Services should develop methods to promote access to programs and services through shared or uniform portals of entry.**

The state should develop systems to promote access to programs through uniform portals of entry

North Carolina offers multiple publicly-funded programs to meet the health, social, nutritional and educational needs of children and their families. These programs are often administered by different agencies (such as health departments, area mental health, developmental disability and substance abuse programs, departments of social services, local schools or other non-profit community agencies), and generally have different eligibility criteria. Services are not always accessible to families or offered during non-work hours. In addition, families may not know what services are available, or how to access them. The North Carolina Department of Health and Human Services has already begun an effort to reengineer publicly-funded social services to make services more accessible to families (the BPR project). This effort should be supported, and expanded to include other publicly funded health programs offered through the North Carolina Department of Health and Human Services.

A PLAN TO IMPLEMENT THE TASK FORCE RECOMMENDATIONS

To facilitate consideration of the Task Force's recommendations, the Task Force developed a schematic to show those recommendations that should be implemented immediately, those that need to be implemented within three years, and those that should be implemented within five years. In this way, the Task Force has visualized a sequential series of policy and action steps that together will extend the benefits of effective health promotion and health care programs to children of all ages in North Carolina. It is our hope that this schematic can serve as the template for a comprehensive child health plan through which the health of our children can be assured. The Task Force is committed to ensure that these recommendations are implemented, and thus, plans to develop annual updates to report on the state's progress in implementing these recommendations.

	Five Year Plan to Improve Child Health		
Dimension of Child Health	**Immediate Action**	**Implement within three years**	**Implement within five years**
Health Education for Children and Families	**1. The State Board of Education should expand the mandatory school health curriculum, ensure the curriculum is being taught and that children understand and adopt healthful living behaviors (as part of the coordinated school health program).** ***(Expand)*** **2. DHHS should initiate a broad-based public awareness campaign to increase understanding of the benefits of healthful living.** ***(Initiate)*** **3. NC General Assembly should expand the "intensive home visiting" program statewide.** ***(Expand)***		The State Board of Education should ensure that by the end of five years, every NC school system has a coordinated school health program. *(Expand)*
Access to Comprehensive System of Care	**4. NC General Assembly should assure access to health insurance for all children by:** **a) expanding outreach efforts;** **b) eliminating the 2-month waiting period for NC Health Choice for children with special needs; and** **c) expanding NC Health Choice to cover uninsured children with family incomes up to 300% FPG with sliding scale premiums and allowing children with higher family incomes to buy-in at full cost.** ***(Expand)***	NC General Assembly should establish a funding source to pay for health care for immigrant children. *(Initiate)*	NC General Assembly and county commissioners should appropriate funds to assure a continuum of mental health and substance abuse services. *(Expand))*

	Five Year Plan to Improve Child Health		
Dimension of Child Health	**Immediate Action**	**Implement within three years**	**Implement within five years**
Access to Comprehensive System of Care	**5. NC General Assembly should appropriate funds to assure one school nurse for every 750 students in NC schools, hiring 150 school nurses per year until this goal is reached (as part of the coordinated school health program).** ***(Expand)***	DHHS should provide technical assistance to local communities to develop school-based/linked health centers. NC General Assembly should appropriate funds for additional centers (as part of the coordinated school health program). *(Expand)*	DMA should determine whether Medicaid provider payments are sufficient to provide adequate compensation to providers offering comprehensive care for children with special needs. *(Develop)*
	6. DHHS should develop a plan, in partnership with other agencies and organizations, to assure every child has access to a regular source of health care. ***(Develop)***	NC General Assembly should appropriate funds for additional school-based support workers, including social workers, mental health and substance abuse professionals, and guidance counselors (as part of the coordinated school health program). *(Expand)*	NC General Assembly should expand child care health consultation program statewide. *(Expand)*
	7. DHHS should expand early identification, referral and treatment of children ages birth-to-five, with a focus on those needing mental health services or who have parents with substance abuse problems. ***(Expand)***	NC General Assembly should expand Child Service Coordination to cover children under age 18 with special health needs. (*Expand)*	DHHS should develop methods to promote access to services through shared or uniform portals of entry. *(Develop)*
	8. DMA should work with DMHDDSAS and other agencies to develop and implement Medicaid policies aimed at expanding the availability of mental health and substance abuse services for children. ***(Develop)***	NC General Assembly should require private insurers to cover mental health and substance abuse services in parity with other medical services. *(Initiate)*	

	Five Year Plan to Improve Child Health		
Dimension of Child Health	**Immediate Action**	**Implement within three years**	**Implement within five years**
Access to Comprehensive System of Care	**9. DHHS should establish mandatory case load limits for child protective services, foster care and adoption workers. *(Initiate)***	DHHS should convene a group of experts to develop a comprehensive child nutrition plan for the state. *(Develop)* NC General Assembly should expand Medicaid to cover uninsured parents of children ages birth-to-18 with incomes below 200% FPG. *(Expand)*	
		NC General Assembly should increase payments to dentists serving Medicaid recipients up to 80% UCR for all dental procedures. *(Expand)* DHHS should work with other appropriate groups to expand cultural sensitivity training for health care professionals and staff. *(Expand)* DHHS should work with other appropriate groups to develop a universal health inventory to screen for risk factors for women of child bearing ages. (*Develop))*	
Comprehensive Child Health Data System	**10. DHHS should create a statewide task force to develop a comprehensive child health data system. *(Develop)***	NC General Assembly should provide funding for system development, implementation and continuing maintenance of a statewide child immunization registry. *(Expand)* NC General Assembly should expand the scope of the Child Fatality Task Force to examine non-fatal injuries*(Expand)*	

	Five Year Plan to Improve Child Health		
Dimension of Child Health	**Immediate Action**	**Implement within three years**	**Implement within five years**
Comprehensive Child Health Data System		DHHS should convene a group of experts and stakeholders to develop a consensus operational definition of "children with special health needs" and systems to measure outcomes and quality. *(Develop)*	

[1] Annie E. Casey Foundation, Kids Count Data Book, 1999: State Profiles of Child Well-Being. Baltimore, 1999.