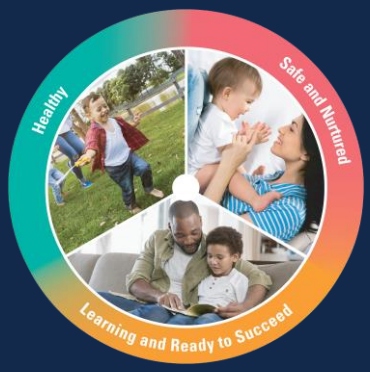

NORTH CAROLINA EARLY CHILDHOOD ACTION PLAN:

DATA CONSIDERATIONS IN RESPONSE TO COVID-19 PROGRAM AND POLICY CHANGES

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Executive Summary

The North Carolina Early Childhood Action Plan (ECAP) was released in February 2019 and established goals and targets based on the current state of child health and well-being to improve early childhood outcomes by 2025. When this plan was released, we could not have known that the COVID-19 pandemic would disrupt lives across the state and nation. COVID-19 necessitated a sudden shift in how programs function and families are served. The pandemic has and will continue to have major public health implications. Further, children and families will experience ripple effects from school closures, the economic recession, extended time away from peers, and strain to the social safety net. Black and Brown families in particular have suffered greatly from COVID-19 due to structural racism and systemic oppression.

The goal of this document is to record changes to NC programs and policies that serve North Carolina families in response to the COVID-19 pandemic, identify data limitations resulting from those changes, and make recommendations about how to use ECAP data moving forward. This project aims to address the unforeseen challenges that have developed due to the COVID-19 pandemic by identifying programs that are being implemented differently and changes to data that are being collected as a result of new implementation approaches.

Background

The North Carolina Early Childhood Action Plan (ECAP), which was released in 2019, establishes ten goals aimed at addressing children's ability to live healthy lives, have safe and nurturing relationships, and learn and be ready to succeed. Each of the ten goals includes targets and sub-targets that serve as indicators of improvement as the State works towards those goals. Goals, targets, sub-targets, and measures reflect the data that were available and the expected function of early childhood service systems prior to the COVID-19 pandemic. The pandemic has disrupted nearly all aspects of those service systems. Therefore, it is important to consider how service systems and data collection changed beginning in March 2020 so we can measure changes in each target and sub-target and make recommendations about how goals may need to shift or be re-prioritized in light of the pandemic.

Current Considerations

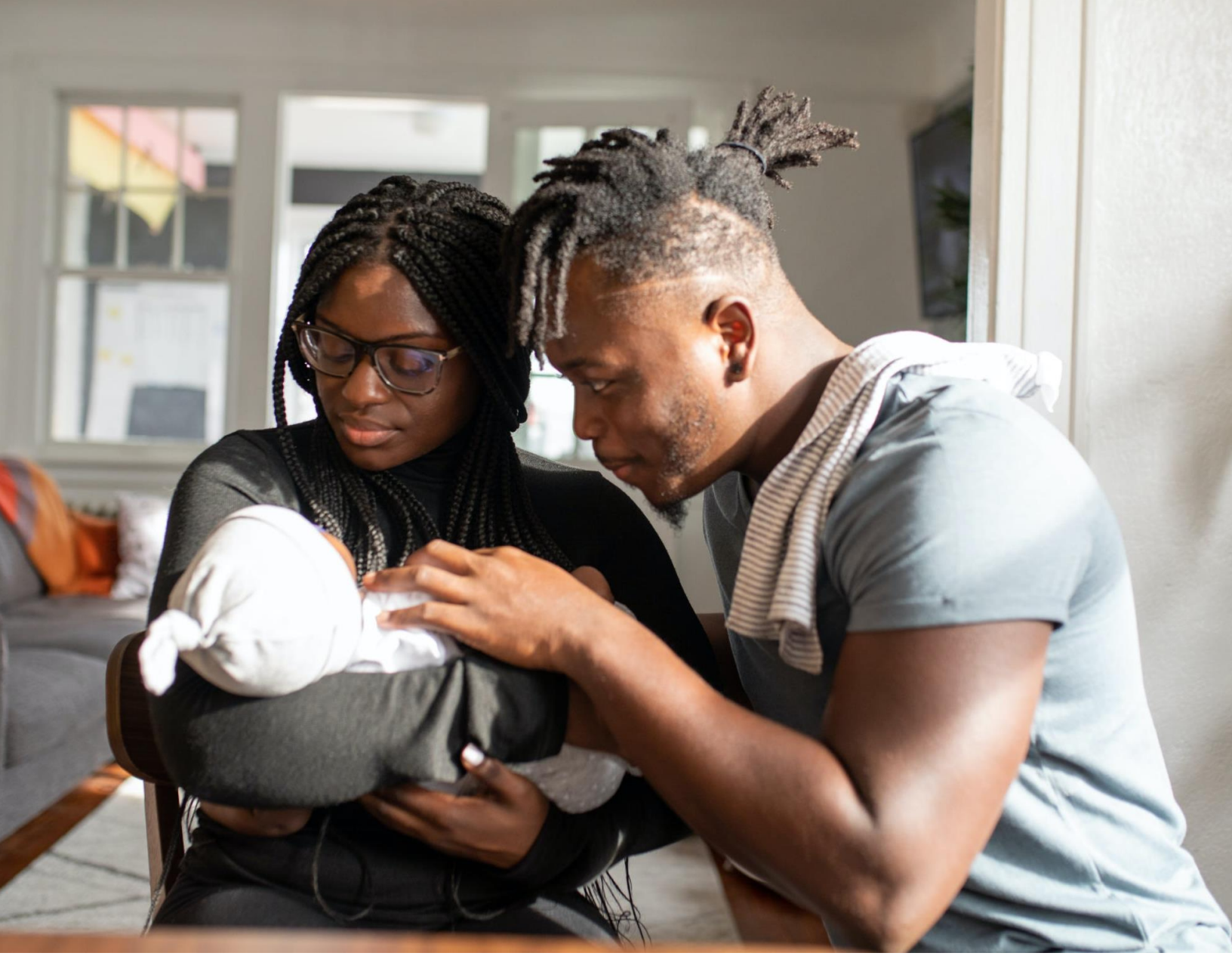
We reviewed each indicator in the ECAP and identified concerns about data quality based on our knowledge in July 2020 about how programs and policies have changed thus far (Table 1). The summary table is color coded to indicate levels of concern over data reliability and validity due to changes in data collection, reporting, or practice in response to COVID-19. Reliability means that data are consistent across time. Validity means that the data are actually measuring the factor(s) they are intended to.

- Low data quality (red) indicates a measure that relies on data we anticipate will be unreliable and potentially invalid due to data collection and reporting changes or due to unknown procedural implications from COVID-19.
- Moderate data quality (yellow) indicates a measure that relies on data we anticipate is reliable but may be affected by currently unknown sources of bias. Data may have uncertain validity.
- High data quality (green) indicates a measure that relies on data we anticipate is reliable and valid and do not have reason to believe that there will be changes in data quality due to COVID-19 related barriers.

We do not recommend eliminating any data sources at this time despite some questions regarding data reliability and validity. It is reasonable to expect to see changes in trends for nearly all indicators beginning in March 2020 due to widespread policy and practice changes. By maintaining all original data sources and indicating where data may be unreliable or invalid, we can better identify whether there were actual changes in key indicators or whether some variance during the COVID-19 period may be due to data quality. We also recommend adding new data sources to some targets in cases where we believe the current data source may not be designed to capture nuanced variation.

We also rate the priority of each target for achieving ECAP goals in 2025 based on current predictions of the level of vulnerability and impacts of the COVID-19 pandemic on the existing ECAP measures.

- High priority (red) means that efforts to meet a target need to increase substantially to overcome deficits that may by imposed by the COVID-19 pandemic or that efforts to meet a target are prioritized because they will have secondary effects on other targets.
- Moderate priority (yellow) means that efforts to meet a target may need to increase but that we do not anticipate downstream impacts due to the COVID-19 pandemic.
- Low priority (green) means that the indicator is still important but that we do not anticipate needing to increase existing efforts to meet targets once programs re-open.



Goal 1: Healthy Babies

ECAP Commitment: Babies across North Carolina from all backgrounds will have a healthy start in their first year of life.

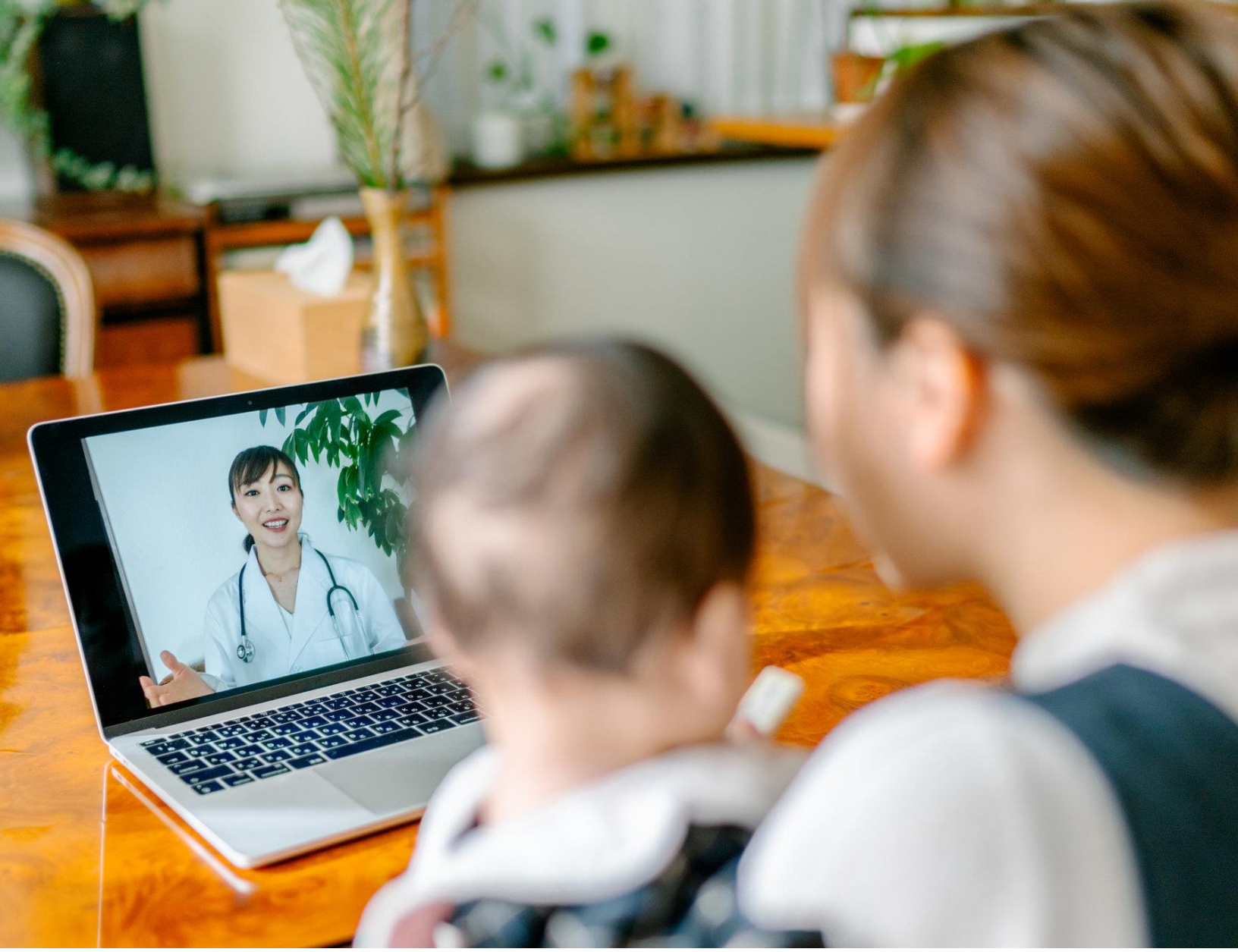
COVID-19 and Possible Impacts on Goal 1 Indicators:

- Insufficient prenatal care is associated with increased risk of infant mortality and low birth weight.[1] Despite recommendations from health officials that women who are pregnant continue to access regular prenatal care,[2] COVID-19 may have introduced new barriers to accessing prenatal care.
- CDC suggests that people who are pregnant and parenting may experience increased stress during the pandemic.[2] Stress may increase the risk of low birth weight.[3]
- COVID-19 is disproportionately impacting communities of color and may therefore exacerbate disparities in prenatal care and birth outcomes, including low birth weight.
- COVID-19 is disproportionately impacting communities of color and may therefore exacerbate disparities in prenatal care and birth outcomes. It will be important to disaggregate data and, if possible, examine changes in causes of infant mortality beginning in March 2020.
- Early data form across the U.S. shows a decline in all-cause mortality among children with the greatest number of reduced deaths among children <1 year. The cause of this decline is unknown.[4]

- Providing parity in coverage for telemedicine removed one barrier for women trying to access preventive health care. However, telemedicine requires that beneficiaries have adequate access to audio-visual technology, including internet. Data from this time period may reflect disparities in access to technology.
- Lactation consultants can provide guidance via telehealth but assistance may be limited without the ability to perform physical assessments and adjustments. This may result in a decrease in breastfeeding.
- Home visiting services may be limited, especially for families that have inadequate access to technology. Home visiting services provide essential breastfeeding supports. A decrease in availability of home visiting services may result in a decrease in breastfeeding.

Indicator	Data Quality Considerations	Vulnerability
Infant Mortality Rate *Current Data Sources: NCDHHS, State Center for Health Statistics*	**High** – Data are drawn from vital records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate** – Infant mortality rates may be impacted by stress, social isolation, and changes in access to prenatal care. Racial disparities in the impacts of COVID-19 may exacerbate racial disparities in infant mortality rates. However, early reports show a significant drop in preterm births, which are a risk factor for infant mortality.
Percent of Babies Born at a Low Birth Weight *Current Data Sources: State Center for Health Statistics, DPH, NCDHHS*	**High** – Data are drawn from vital records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate –** Low birth weight rates may be impacted by stress, social isolation, and changes in access to prenatal care. Racial disparities in the impacts of COVID-19 may exacerbate racial disparities in low birth weight rates.
Percent of Pregnancy Intendedness *Current Data Sources: PRAMS, State Center for Health Statistics, DPH, NCDHHS*	**High** – Data are based on PRAMS survey questions. We do not anticipate that data quality will change in response to COVID-19.	**Low** – We do not anticipate that additional long-term efforts will need to be made in response to COVID-19 to meet this target.
Percent of Women Aged 18-44 Years Who Had Routine Preventive Health Visit in Past Year *Current Data Sources: BRFSS, State Center for Health Statistics, DPH, NCDHHS*	**High** – Data are based on BRFSS survey questions and administrative records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate –** While we do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits, this indicator may have downstream effects on other indicators. Additional efforts may be needed to address disparities in who is able to access preventive health care through telehealth technology.

Indicator	Data Quality Considerations	Vulnerability
Percent of Infants Ever Breastfed, Breastfed at 6 Months *Current Data Sources: National Immunization Survey, CDC*	**High** – Data are drawn from the National Immunization Survey. We do not anticipate that data quality will change in response to COVID-19.	**Low** – Existing efforts to promote breastfeeding should continue but we do not anticipate the need for additional efforts in response to COVID-19 to meet this target.
Percent of Families with Children Aged 0-8 Living at or Below 200% Federal Poverty Level *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Data are drawn from the American Community Survey and U.S. Census Bureau. We do not anticipate that data quality will change in response to COVID-19.	**High** – We anticipate that economic impacts from the COVID-19 pandemic will increase the percent of families with young children living at or below the FPL. Poverty is an upstream indicator that increases risk for many other ECAP targets.



Goal 2: Preventive Health Services

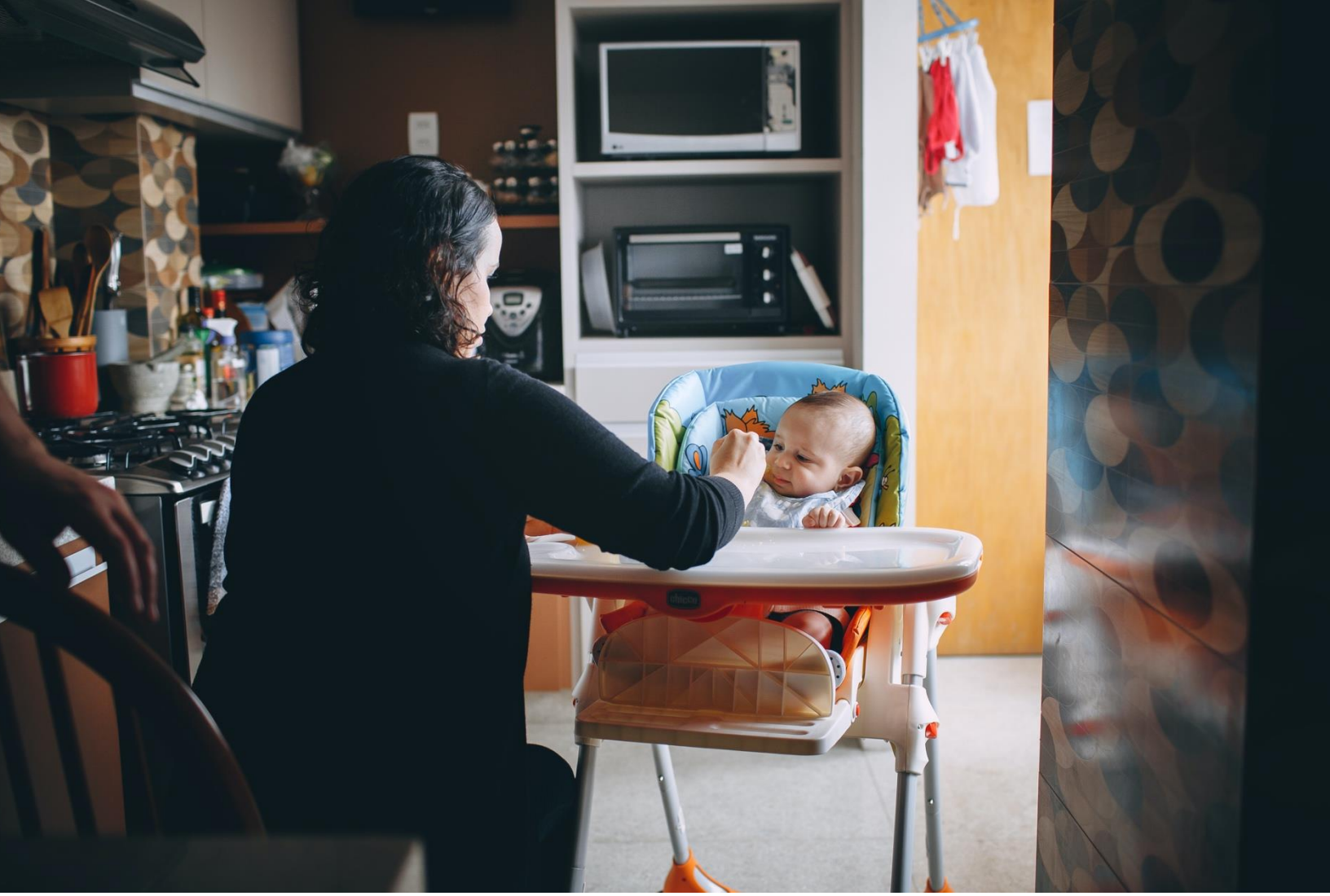
ECAP Commitment: Babies, toddlers, young children and their families will have regular, ongoing access to high-quality healthcare.

COVID-19 and Possible Impacts on Goal 2 Indicators:

- Disparities in well-child visits may be exacerbated as disparities in access to technology and reliable internet exist.
- It is possible that families lost health insurance due to lay-offs in response to COVID-19 closures.
- Under Medicaid guidance, teledentistry services should be limited to triage or evaluation of urgent or emergent oral health problems.
- We may observe a decrease in the percent of children who are up-to-date on immunizations as children are not otherwise visiting doctors' offices.
- Medicaid allowed well-child visits to be conducted via telehealth technology when audio and visual components are available.

Indicator	Data Quality Considerations	Vulnerability
Percent of young children aged 0-15 months and 3-6 years enrolled in Medicaid and Health Choice who receive regular well-child visits. *Current Data Sources: NC Medicaid, Healthcare Effectiveness Data and Information Set Measures*	**High** – Data are drawn from administrative records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate –** Regular well-child visits for children who turn 15 months old during the measurement period are defined as at least six well-child visits with a primary care physician in the first 15 months of life. Regular well-child visits for children 3-6 years old are defined as one or more well-child visits during the measurement period. Some children may have missed visits due to COVID-19 closures or precautions. This is not of high concern because most pediatricians' offices continued to see young children in person throughout the pandemic. However, this indicator may have downstream effects on other indicators. Additional efforts may be needed to address disparities in who is able to access preventive health care through telehealth technology.
Percent of Children Aged 0-8 years with Health Insurance *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Medicaid enrollment has continued throughout the COVID-19 Pandemic. Changes in trends may be related to changes in family income or employment but there is no reason to be concerned about the quality or reliability of data supporting this indicator at this time.	**High –** Health insurance is an upstream indicator that affects access to health services. Health insurance is also intricately linked to family income and employment, both of which may be impacted by COVID-19 economic losses.
Percent of Heads of Household of Children Aged 0-8 years with Health Insurance *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Medicaid enrollment has continued throughout the COVID-19 Pandemic. Changes in trends may be related to changes in family income or employment but there is no reason to be concerned about the quality or reliability of data supporting this indicator at this time.	**High –** Health insurance is an upstream indicator that affects access to health services. Health insurance is also intricately linked to family income and employment, both of which may be impacted by COVID-19 economic losses.
Percent of 19-35-Month-Old Children Who Are Up-to-Date on Immunizations	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Low –** We do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits. Nationally, we have observed a steep decline in the number

Indicator	Data Quality Considerations	Vulnerability
Current Data Source: National Immunization Survey		of immunizations administered from the end of March through mid-April,[5] so there will need to be some emphasis placed on catching children up on immunizations who missed routine visits due to office closures.
Percent of Children Enrolled in Medicaid or Health Choice Receiving At Least One Dental Service in the Last Year *Current Data Sources: Dental Quality Alliance Utilization of Services Measures, NC Medicaid*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Moderate –** While we do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits, this indicator may have downstream effects on other indicators.
Percent of Children Enrolled in Medicaid or Health Choice Receiving 4 or More Varnishings by 42 Months of Age *Current Data Source: NC Medicaid*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Low –** We do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits.
Percent of Children Ages 1- and 2-years Receiving Lead Screening *Current Data Sources: NC LEAD Surveillance System, Children's Environmental Health, Division of Public Health, NCDHHS*	**High** – We do not anticipate that data quality will change in response to COVID-19. However, focusing just on lead screening is insufficient. Children should also receive screenings for additional toxins, including PFAS, arsenic, and mercury. These toxins can inhibit neurodevelopment and emerging evidence suggests that elevated exposure to chemical toxins may increase risk of contracting COVID-19.	**Low –** We do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits. *However, we need additional stakeholder input to understand how children are currently receiving lead screenings and screenings for other environmental toxins.*
Percent of Families with Children Aged 0-8 Living at or Below 200% Federal Poverty Level *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Data are drawn from the American Community Survey and U.S. Census Bureau. We do not anticipate that data quality will change in response to COVID-19.	**High** – We anticipate that economic impacts from the COVID-19 pandemic will increase the percent of families with young children living at or below the FPL. Poverty is an upstream indicator that increases risk for many other ECAP targets.



Goal 3: Food Security

ECAP Commitment: Babies, toddlers, young children, and their families across North Carolina will have access to enough healthy food every day.

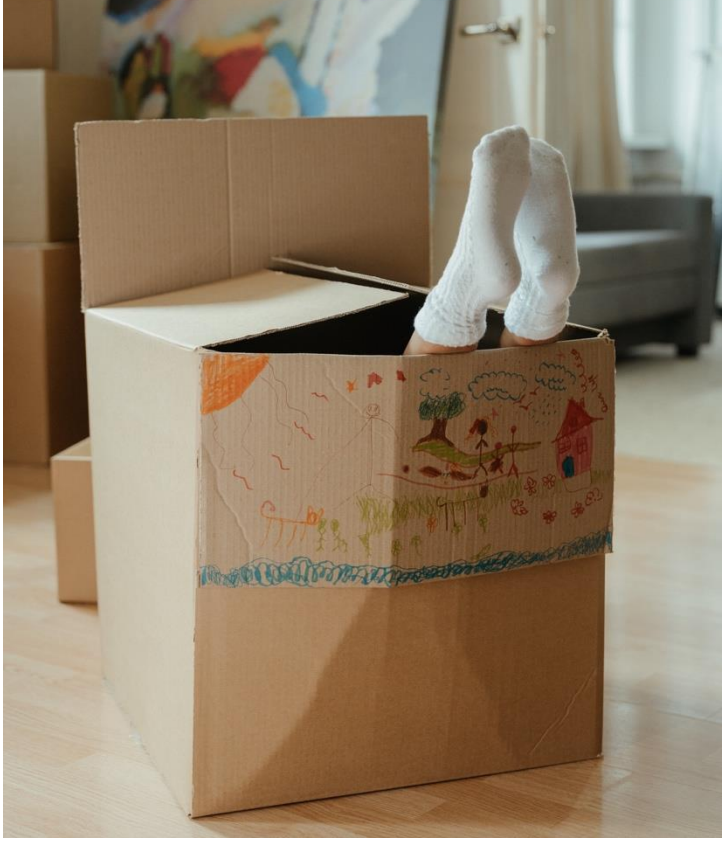
COVID-19 and Possible Impacts on Goal 3 Indicators:

- COVID-19 placed strain on the food market early in the pandemic, limiting access to staple foods. Many families have experienced loss of income to COVID-19 job loss or reductions in employment hours which may increase food insecurity.
- The number of WIC income-eligible families may increase as a result of COVID-19 economic impacts.
- A number of factors may limit children's food access. However, changes in food access may not be reflected in the data as the current food access indicator is a measure of proximity to grocery stores or other food sources. These data do not reflect families' ability to purchase food or the amount of food in the home available to children.
- Weight and body composition assessments may not be possible through telehealth. There may be gaps in data.

Indicator	Data Quality Considerations	Vulnerability
Rate of Children 0-17 Years who are Food Insecure *Current Data Source: Feeding America*	**High** – Food insecurity is measured at the state and county level using publicly available state and local data from the U.S. Census Bureau and Bureau of Labor Statistics on factors that research has shown to contribute to food insecurity. These factors include unemployment and poverty as well as other socioeconomic and demographic characteristics. Beginning in 2020, the estimates also account for disability status. We do not anticipate that data quality will change in response to COVID-19.	**High** – Food insecurity among children may increase due to changes to school breakfast and lunch programs. These changes may not be reflected in the existing data source. Food insecurity may have downstream effects on other indicators, including the percent of children who are overweight or obese.
Percent of Eligible Families in North Carolina Receiving State and Federal Supplemental Food/Nutrition Assistance Benefits from WIC Current Data Sources: *NC Women, Infants, and Children (WIC) Program, Nutrition Services Branch, Division of Public Health, NCDHHS*	**High** – Estimates of the population eligible for WIC services are calculated by estimating the number of individuals at risk using the following data sources: 1) Number of live births, 2) Number of fetal deaths, 3) Population 0-4 years of age, 4) Percent of population with income less than 185% of poverty. We do not anticipate that data quality will change in response to COVID-19.	**High** – The number of eligible families may increase and the capacity of WIC offices may decrease in the short-term in response to COVID-19. Federal guidelines waived some barriers to enrolling in WIC in light of COVID-19. Enrollment in WIC may have downstream effects on other indicators.

Indicator	Data Quality Considerations	Vulnerability
Percent of Children 0-17 Years Who Have Low Access to Healthy Food *Current Data Sources: U.S. Department of Agriculture*	**Moderate** – Low access to healthy food is defined as living more than ½ mile (urban areas) or more than 10 miles (rural areas) from the nearest supermarket, supercenter, or large grocery store. This measure relies on GIS data and therefore we do not anticipate that the data quality will change in response to COVID-19; however, this measure may not accurately reflect food access as food supply chains may be impacted by COVID-19.	**High** – Low access to healthy food among children may increase due to changes to school breakfast and lunch programs. These changes may not be reflected in the existing data source. Low access to health food may have downstream effects on other indicators, including the percent of children who are overweight or obese.
Percent of Children in North Carolina Aged 2-4 Years Who Receive WIC and Who Are Classified as Either Overweight or Obese *Current Data Sources: NC Women, Infants, and Children (WIC) Program, Nutrition Services Branch, Division of Public Health, NCDHHS*	**Low** – Measures of overweight and obesity are dependent on BMI, which is an anthropometric measure. NC was granted a waiver lifting requirements for anthropometric measures for WIC recipients through May 31, 2020. Therefore, we anticipate not having a reliable source of data for the number of children who are overweight or obese from mid-March through May 2020. Some data may be available through NC Care 360.	**Moderate** – Children's access to healthy foods and physical activities may be limited due to COVID-19, which may increase the risk of overweight or obesity in young children who receive WIC.
Percent of Families with Children Aged 0-8 Living at or Below 200% Federal Poverty Level *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Data are drawn from the American Community Survey and U.S. Census Bureau. We do not anticipate that data quality will change in response to COVID-19.	**High** – We anticipate that economic impacts from the COVID-19 pandemic will increase the percent of families with young children living at or below the FPL. Poverty is an upstream indicator that increases risk for many other ECAP targets.

Goal 4: Safe and Secure Housing



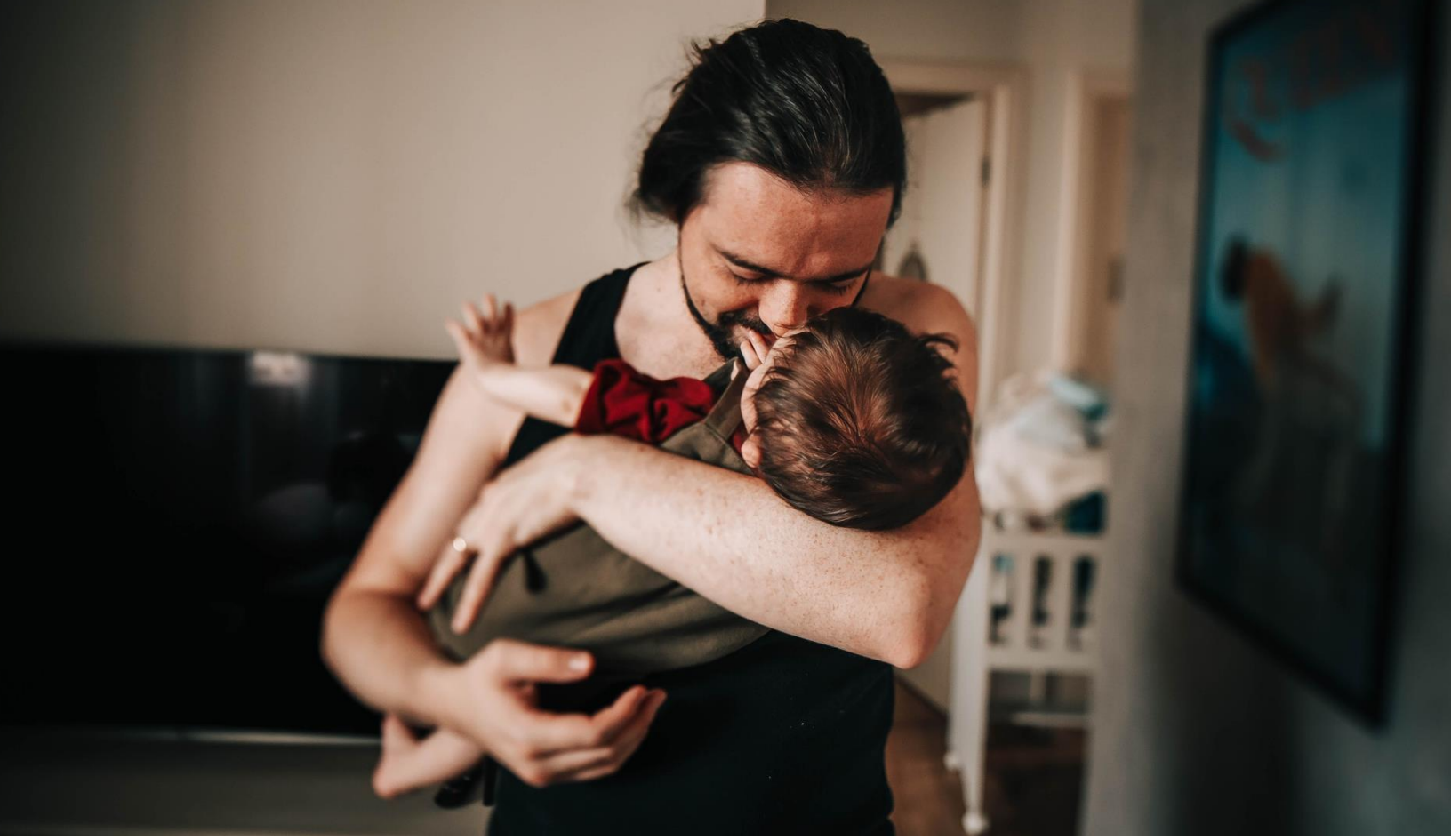
ECAP Commitment: Babies, toddlers, young children and their families across North Carolina will have access to safe, secure, and affordable housing.

COVID-19 and Possible Impacts on Goal 4 Indicators:

- Due to statewide suspensions of eviction for non-payment, we may see a decrease in the percentage of children experiencing homelessness from March-June and then an increase in July and subsequent months.
- Identification of children who are newly experiencing homelessness may be hindered as children are not in school. Schools report residency data to NC DPI. Schools may not have accurate information on student's residency status while they are not physically in school and if they are not able to connect with families remotely.
- The number of children under age 6 who experience homelessness is estimated based on the number of children grades K-12 who are experiencing homelessness. Because schools may not have accurate information on students' residency status while schools are closed, estimates of the number of children under age 6 who are experiencing homelessness may be inaccurate.
- High housing cost burden may increase due to COVID-19 financial strains resulting from loss of work.
- Children experiencing homelessness may experience increased disparities in access to quality early care and education.
- The CDC released data from the National Syndromic Surveillance Program in June 2020 indicating that emergency department visits across age groups and conditions declined 42% during the early weeks of the pandemic (March 29-April 25, 2020) compared to the same time period in 2019 and that the steepest decline was in persons aged ≤14 years. Asthma is among the top 20 categories of conditions with lower visit counts during the early pandemic period. Compared to the same period in 2019, there was an 84% decrease in the number emergency department visits for asthma among children <10 years.[6] Emerging researchers suggests that this decline is in part due to patients avoiding hospital settings but may also be associated with reduced person-to-person transmission of respiratory viruses in schools and child care settings, reduced exposure to outdoor allergens, and reduced traffic and industrial pollution.[7]
- Children's access to blood lead screenings is limited due to COVID-19 restrictions.

Indicator	Data Quality Considerations	Vulnerability
Children Under Age 6 Who Are Experiencing Homelessness *Current Data Sources: NC Department of Public Instruction, NCDHHS, Division of Child Development and Early Education*	**Low** – The number of children under age 6 who experience homelessness is estimated based on the number of children grades K-12 who are experiencing homelessness. Because schools may not have accurate information on students' residency status while schools are closed, estimates of the number of children under age 6 who are experiencing homelessness may be inaccurate.	**High** – The statewide moratorium on evictions ended in June 2020, but families continue to experience economic losses. Limited resources and high rates on unemployment may result in an increase in the number of children who are experiencing homelessness. There will likely be long-term economic impacts from COVID-19.
Number of Children K-3rd Grade Enrolled in NC Public Schools Experiencing Homelessness *Current Data Sources: NC Department of Public Instruction, NCDHHS, Division of Child Development and Early Education*	**Low** – Schools report residency data to NC DPI. Schools may not have accurate information on student's residency status while they are not physically in school and if they are not able to connect with families remotely.	**High** – The statewide moratorium on evictions ended in June 2020, but families continue to experience economic losses. Limited resources and high rates on unemployment may result in an increase in the number of children who are experiencing homelessness. There will likely be long-term economic impacts from COVID-19.
Percent of Households with Children 0-8 Years Facing High Housing Cost Burden *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**High –** The burden of housing cost is likely to increase as households experience widespread economic losses and housing costs remain high.
Rate of Emergency Department Visits for Asthma Care per 1,000 Children Ages 0-8 *Current Data Sources: NC DETECT, Division of Public Health, NCDHHS*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Low –** Thus far we have seen a dramatic decline in children's ED visits and it is not clear what is driving this trend. Additional information is needed to know if this indicator requires increased attention.

Indicator	Data Quality Considerations	Vulnerability
Percent of Young Children (0-6 years) Receiving Lead Screening with Confirmed Elevated Blood Lead Levels *Current Data Sources: NCLEAD Surveillance System, Children's Environmental Health, Division of Public Health, NCDHHS*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Low –** We do not anticipate that additional long-term efforts will need to be made in response to COVID-19 to meet this target.
Percent of Families with Children Aged 0-8 Living at or Below 200% Federal Poverty Level *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Data are drawn from the American Community Survey and U.S. Census Bureau. We do not anticipate that data quality will change in response to COVID-19.	**High** – We anticipate that economic impacts from the COVID-19 pandemic will increase the percent of families with young children living at or below the FPL. Poverty is an upstream indicator that increases risk for many other ECAP targets.



Goal 5: Safe and Nurturing Relationships

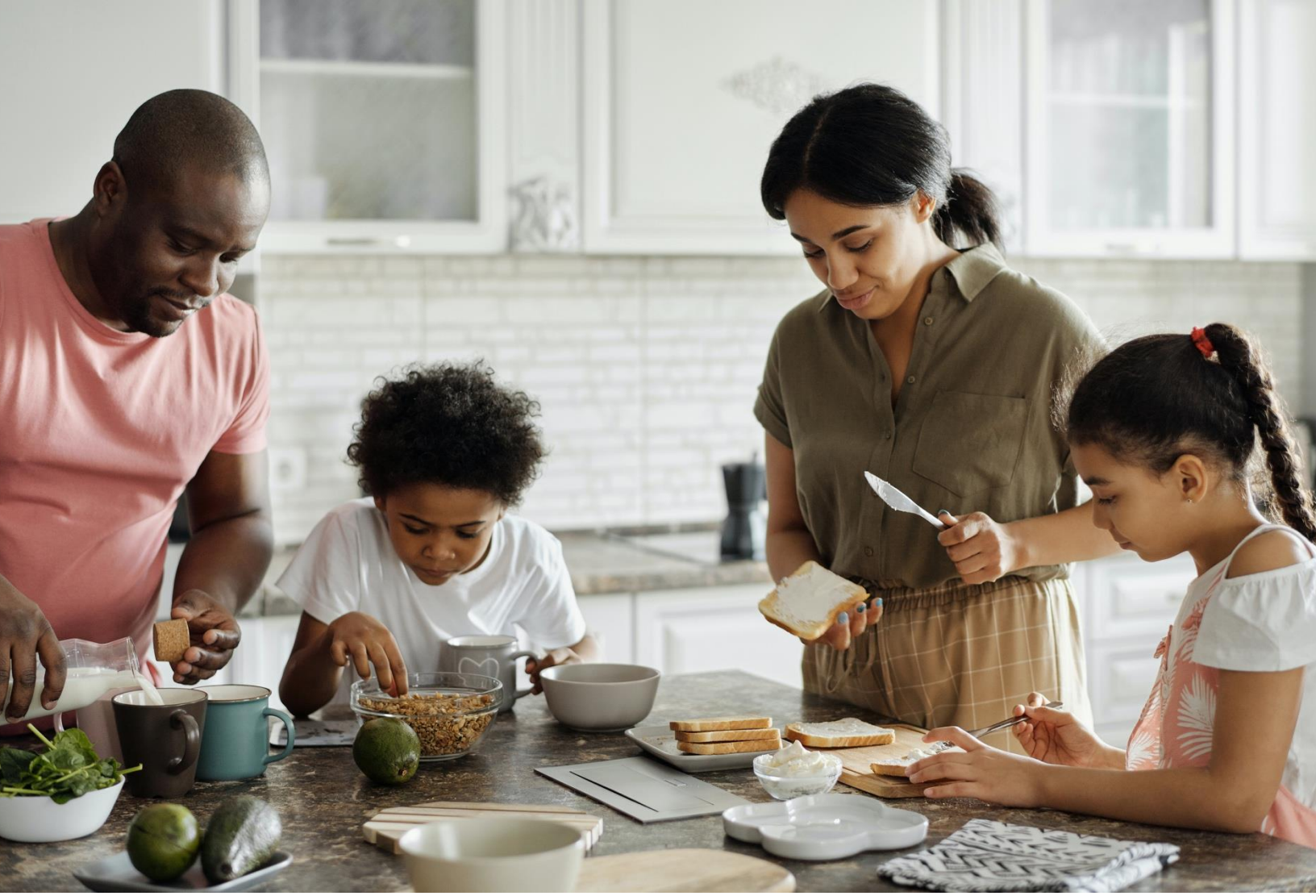
ECAP Commitment: Babies, toddlers, and young children across North Carolina will grow up with safe and nurturing family and caregiver relationships.

COVID-19 and Possible Impacts on Goal 5 Indicators:

- Early data across the US is showing a dramatic decrease in the number of referrals being made to CPS, similar to what is typically seen over extended school breaks. It is unlikely that maltreatment rates are decreasing as COVID-19 restrictions are exacerbating risk factors, such as financial stress and material hardship, and limiting access to protective factors, such as social support. Referrals to CPS are often made by teachers, doctors, law enforcement, or other adults outside the home. These people have limited access to children as schools are closed and many doctors' visits have moved to telehealth technology. While the rate reflects the number of substantiated cases over the number referred, the cases that are being referred currently may be more severe with more noticeable evidence of maltreatment.
- Case workers may have less collateral evidence to substantiate referrals.
- Social isolation and loss of social support/resources at school and other activities outside of the home may expose children to more ACEs and/or exacerbate the effects of ACEs.
- Home visiting services are being implemented through video conferencing. However, home visitors may not be able to identify some needs in the home that they would be able to identify if they were in-person. This may lead to more ACEs.
- COVID-19 may contribute to an increase in disparities in who receives post-partum depression screenings due to disparities in access to telehealth technology. Medicaid has continued enrollment and providers are allowed to conduct screening via telehealth when both audio and visual technologies are available. Providers may have a harder time screening mothers who do not have reliable internet access or audio-visual technology.

Indicator	Data Quality Considerations	Vulnerability
Rate of Children 0-8 years who are substantiated for maltreatment *Current Data Sources: Division of Social Services Central Registry, NC FAST*	**Low** – Maltreatment substantiation rates are calculated based on the number of reports that are screened in for assessment. There are always inherent limitations to these data due to the bias of who is reported to DSS. It is likely that children who may be experiencing maltreatment who would normally be identified by teachers, health care professionals, or other people in the public are not being identified while families are at home. It is possible that more severe cases of maltreatment are being reported to DSS while less severe cases may not be identified. Stay at home orders may also limit the information that can be collected during an investigation. Therefore, data on maltreatment substantiation rates are unreliable at this time.	**High** – Social isolation, material hardship, and parental mental health are all associated with increased risk of child maltreatment. It is likely that risk related to all of these factors has increased due to social distancing and the economic impacts of COVID-19. Additionally, risk may increase when children are not going to school or participating in other activities that may protect them from maltreatment. Increased efforts will be necessary to meet family needs to prevent maltreatment.
Percent of Children 0-8 Years with Two or More Adverse Childhood Experiences (ACEs) *Current Data Sources: National Survey of Children's Health, U.S. DHHS*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**High** – Social isolation, material hardship, and parental mental health are all associated with increased risk of child maltreatment and parental substance use (just two forms of ACEs). It is likely that risk related to all of these factors has increased due to social distancing and the economic impacts of COVID-19. Additionally, risk may increase when children are not going to school or participating in other activities that may protect them from ACEs or reduce the impact of ACEs. Increased efforts will be necessary to meet family needs to prevent ACEs.

Indicator	Data Quality Considerations	Vulnerability
Percent of Children Enrolled in Medicaid with at Least One Documented Maternal Post-Partum Depression Screen for Mother *Current Data Sources: NC Medicaid*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Low** - We do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits.
Rate of Emergency Department Visits for Injuries per 1,000 Children Ages 0-8 Years *Current Data Sources: NC DETECT, Division of Public Health, NC DHHS*	**High** – We do not anticipate that data quality will change in response to COVID-19.	**Low –** Thus far we have seen a dramatic decline in children's ED visits and it is not clear what is driving this trend. Additional information is needed to know if this indicator requires increased attention.



Goal 6: Permanent Families for Children in Foster Care

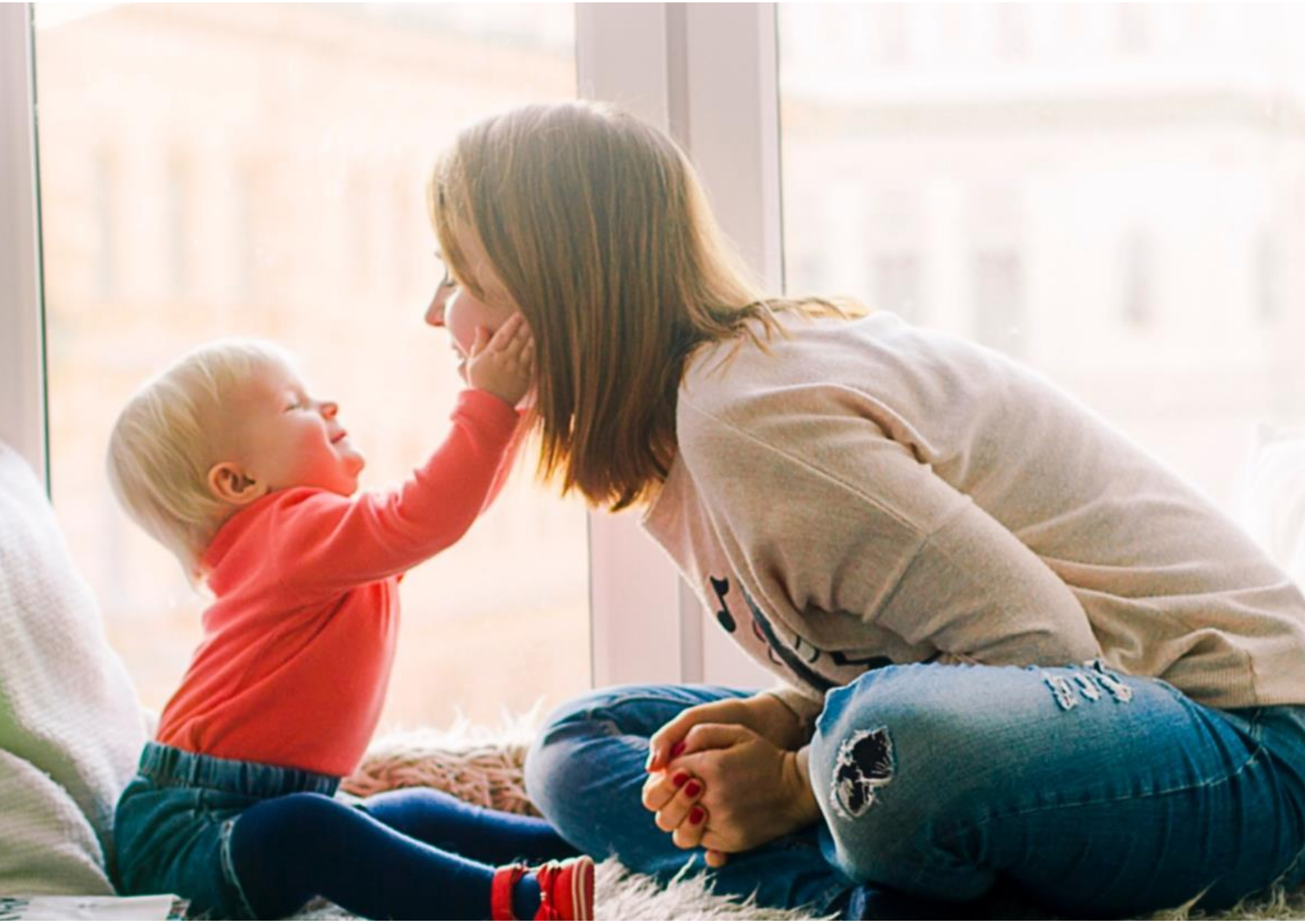
ECAP Commitment: Babies, toddlers, and young children in North Carolina's foster care system will grow up in stable, consistent, and nurturing families, whether that is the child's birth family or through an adoptive family.

COVID-19 and Possible Impacts on Goal 6 Indicators:

- Families may face challenges completing the court ordered services that DSS is looking for them to complete due to closings, limited space available in programs, or limited remote access to services. This may have a long-term effect on the number of days to reunification beyond the COVID-19 emergency period.
- Families may face new or exacerbated challenges due to the stress and economic impact of COVID-19 that could extend time to reunification, adoption and termination of parental rights.
- In-person hearings were suspended from March 13-June 1, 2020. While some cases were heard via video conference or decided based on consent during this period, it is unknown if adjudication hearings were heard.
- District and superior courts were instructed to reschedule hearings to be heard after June 1, 2020 except in the case of emergency proceedings, including a domestic violence protection order, temporary restraining order, juvenile custody order, judicial consent to juvenile medical treatment order.

Indicator	Data Quality Considerations	Vulnerability
Number of Days to Reunification, Guardianship, or Custody for Children in Foster Care *Current Data Sources: Division of Social Services, Child Placement and Payment System, NC FAST*	**Moderate** – There may be delays in processing court records that could impact data quality.	**High –** Impacts will likely extend beyond acute COVID-19 quarantine period(s). Courts may be more lenient with parents with regard to the time it takes to achieve service/treatment goals due to COVID-19 closures.
Median Number of Days to Adoption for Children in Foster Care, if Reunification is Not Appropriate *Current Data Sources: Division of Social Services, Child Placement and Payment System, NC FAST*	**Moderate** – There may be delays in processing court records that could impact data quality.	**High** – Many factors may increase the average number of days to adoption for children in foster care, including delays in decisions to terminate parental rights or and new barriers to identifying adoptive families resulting from COVID-19.
Percent of Child Welfare Cases Adjudicated Within 60 days *Current Data Sources: Juvenile Court Record Database (JWISE), NC Administrative Office of the Courts (AOC)*	**Moderate** – There may be delays in processing court records that could impact data quality.	**Low** – Court cases are currently being held remotely or with as many people in the court room as deemed safe with other parties remote through Webex. We do not anticipate any long-term impacts on time to adjudication once courts re-open.
Percent of Child Welfare Cases That Have an Initial Permanency Planning Hearing Within 12 Months of Removal from the Home *Current Data Sources: Juvenile Court Record Database (JWISE), NC Administrative Office of the Courts (AOC)*	**Moderate** – There may be delays in processing court records that could impact data quality.	**High –** We anticipate potential delays to an initial permanency planning hearing, including barriers parents face to accessing recommended services and court closures. Delays in initial permanency planning hearings may have downstream implications for the number of days to reunification, termination of parental rights, and adoption.

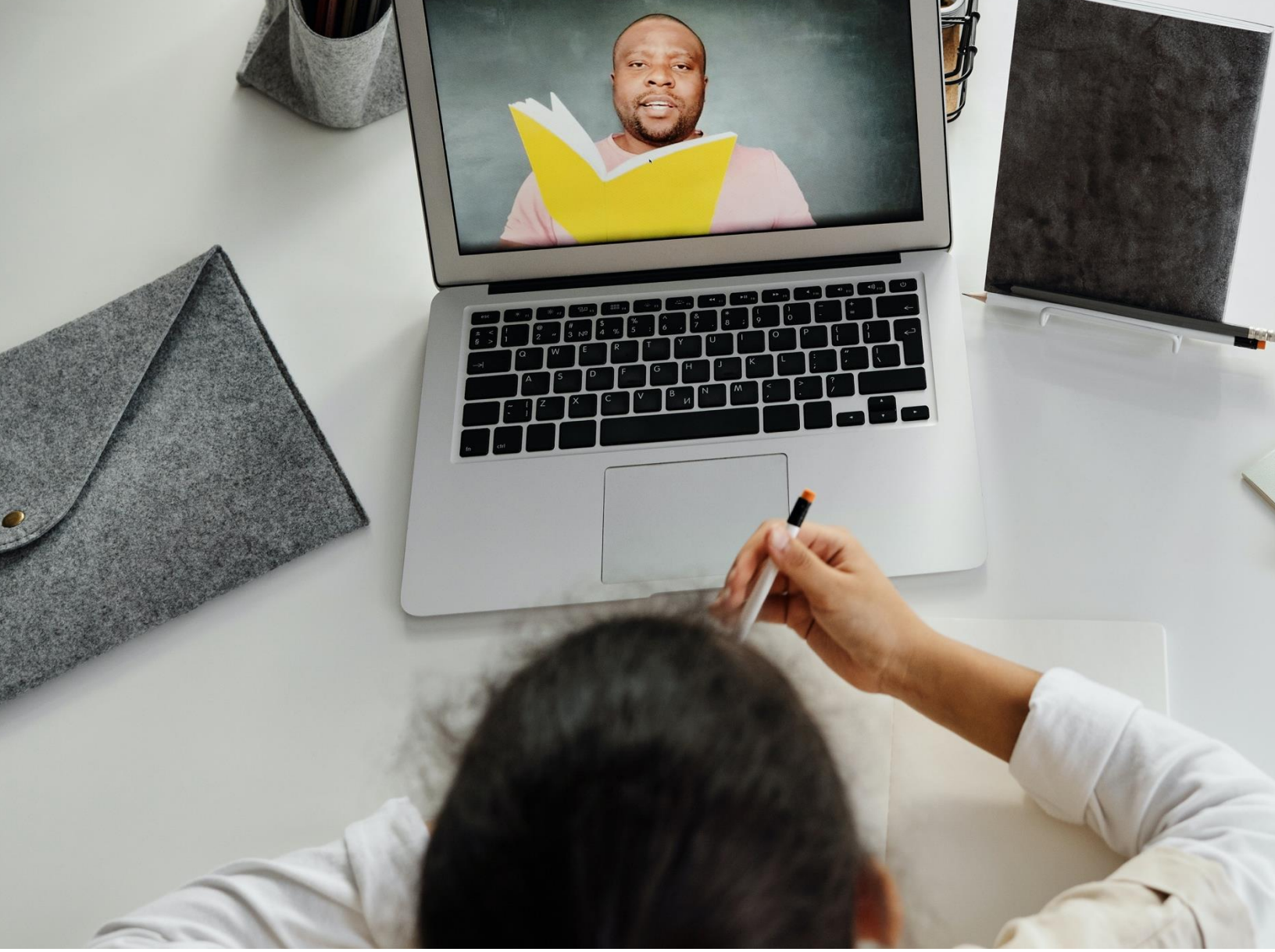
Indicator	Data Quality Considerations	Vulnerability
Median Number of Days to Termination of Parental Rights *Current Data Sources: Juvenile Court Record Database (JWISE), NC Administrative Office of the Courts (AOC)*	**Moderate** – There may be delays in processing court records that could impact data quality.	**High** – Decisions to terminate parental rights may be postponed if family of origin is not able to access services that may promote reunification. This may impact other indicators, including time to adoption.



Goal 7: Social-Emotional Health and Resilience

ECAP Commitment: Babies, toddlers, and young children across North Carolina will express, recognize, and manage their emotions in a healthy way, especially under stress.

*****The Goal 7 target is to develop a reliable measure of young children's social-emotional health and resilience at the population level by 2025. This is more important than ever knowing that COVID-19 is undoubtedly impacting children's social-emotional well-being.*****



Goal 8: High-Quality Early Learning

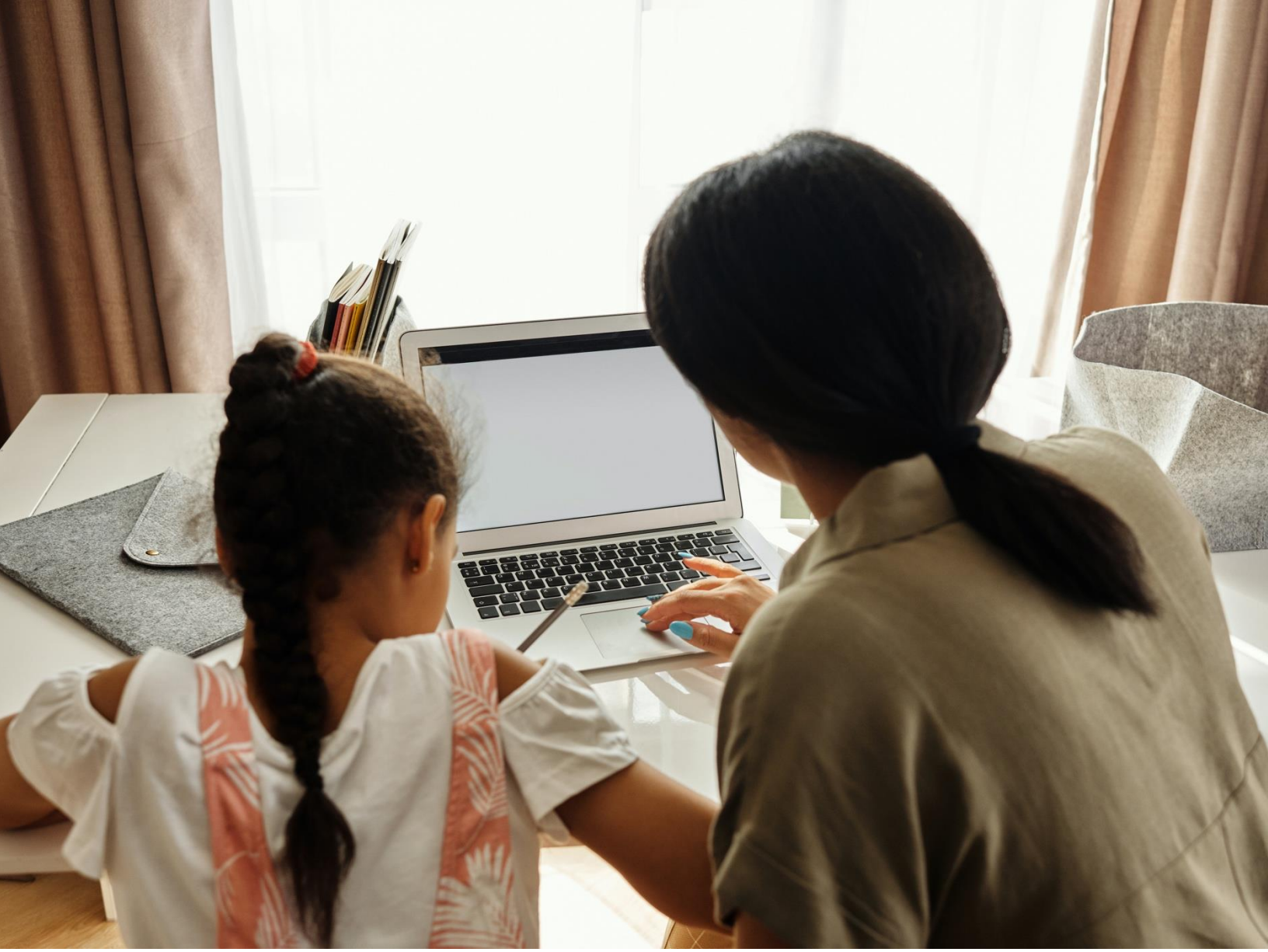
ECAP Commitment: Babies, toddlers, and young children across North Carolina will have access to high-quality opportunities to engage in early learning.

COVID-19 and Possible Impacts on Goal 8 Indicators:

- The number of children who meet eligibility requirements for NC Pre-K and child care subsidies based on income may increase due to COVID-19 related job losses.
- The percent of income eligible children enrolled in NC Pre-K may skew lower than usual if the number of children who meet eligibility requirements (denominator) grows and/or if classroom capacity decreases due to distancing requirements and the number of NC Pre-K classrooms remains the same.
- The percent of family income spent on child care may be skewed lower than usual if families are keeping children home or not paying to maintain enrollment during COVID-19 closures.

Indicator	Data Quality Considerations	Vulnerability
Percent of Income-Eligible Children Enrolled in NC Pre-K *Current Data Sources: Division of Child Development and Early Education, NC DHHS*	**Moderate** – Administrative records may reflect enrollment at the beginning of March. Data are currently reported as the percent of children served annually. If data are disaggregated by month, enrollment numbers may not be accurate.	**High** – There may be more children who become income-eligible for NC Pre-K due to economic losses and fewer classrooms spots available if enrollment numbers are limited to allow for distancing in schools. Children who are income-eligible for NC Pre-K stand to gain the most benefits from early education. Pre-K education is associated with better primary school education outcomes. We do not know if Pre-K classrooms will open in the Fall for in-person learning. Additional efforts are needed to meet children's early learning needs at home.
Percent of Family Income Spent on Child Care *Current Data Sources: Child Care Aware America*	**Moderate** – Data may not accurately reflect changes in spending or changes in family income beginning in March 2020.	**High** – Child care needs may increase if children do not return to school. Families may also be spending a higher percentage of their income of child care if family income decreased due to employment losses.
Percent of Eligible Children Whose Families Receive Child Care Subsidy and Are Enrolled in 4- or 5-Star Centers or Homes *Current Data Sources: Division of Child Development and Early Education, NC DHHS*	**Moderate** – Administrative records may reflect enrollment at the beginning of March. Data are currently reported as the percent of children served annually. If data are disaggregated by month, enrollment numbers may not be accurate.	**High –** The number of families who are income eligible for child care subsidies may increase while the number of spaces available in high-quality child care centers or homes may decrease if enrollment is limited to allow for more distancing. Additional efforts may be needed to improve the ratings of child care centers and homes to meet this target.
Percent of Eligible Children Enrolled in Head Start *Current Data Sources: North Carolina Head Start State Collaboration Office*	**Moderate** – Administrative records may reflect enrollment at the beginning of March. Data are currently reported as the percent of children served annually. If data are disaggregated by month, enrollment numbers may not be accurate.	**High** – There may be more children who become income-eligible for Head Start due to economic losses and fewer classrooms spots available if enrollment numbers are limited to allow for distancing in schools. Children who are income-eligible for Head Start stand to gain the most benefits from early education. Head Start education is associated with better primary school education outcomes. We do not know if Head Start classrooms will open in the Fall for in-person learning.

Indicator	Data Quality Considerations	Vulnerability
		Additional efforts are needed to meet children's early learning needs at home.
Percent of Early Childhood Teachers with Post-Secondary Early Childhood Education *Current Data Sources: Child Care Services Association Early Childhood Workforce Studies, Division of Child Development and Early Education, NC DHHS*	**High** – Data are drawn from the Child Care Services Association Early Childhood Workforce Studies. We do not anticipate that data quality will change in response to COVID-19.	**Low -** We do not anticipate existing efforts will need to be amplified due to COVID-19.
Percent of Full-Time Early Care and Education Teachers in North Carolina Who Left Their Centers During the Previous 12 Months *Current Data Sources: Division of Child Development and Early Education, NC DHHS*	**High** – Data are drawn from administrative records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate** – In April, less than 1% of NC Pre-K sites reported that teachers had been laid off during the COVID-19 emergency. More teachers and early child care providers may have left centers in response to the uncertainty of re-opening plans and concerns about safety.



Goal 9: On Track for School Success

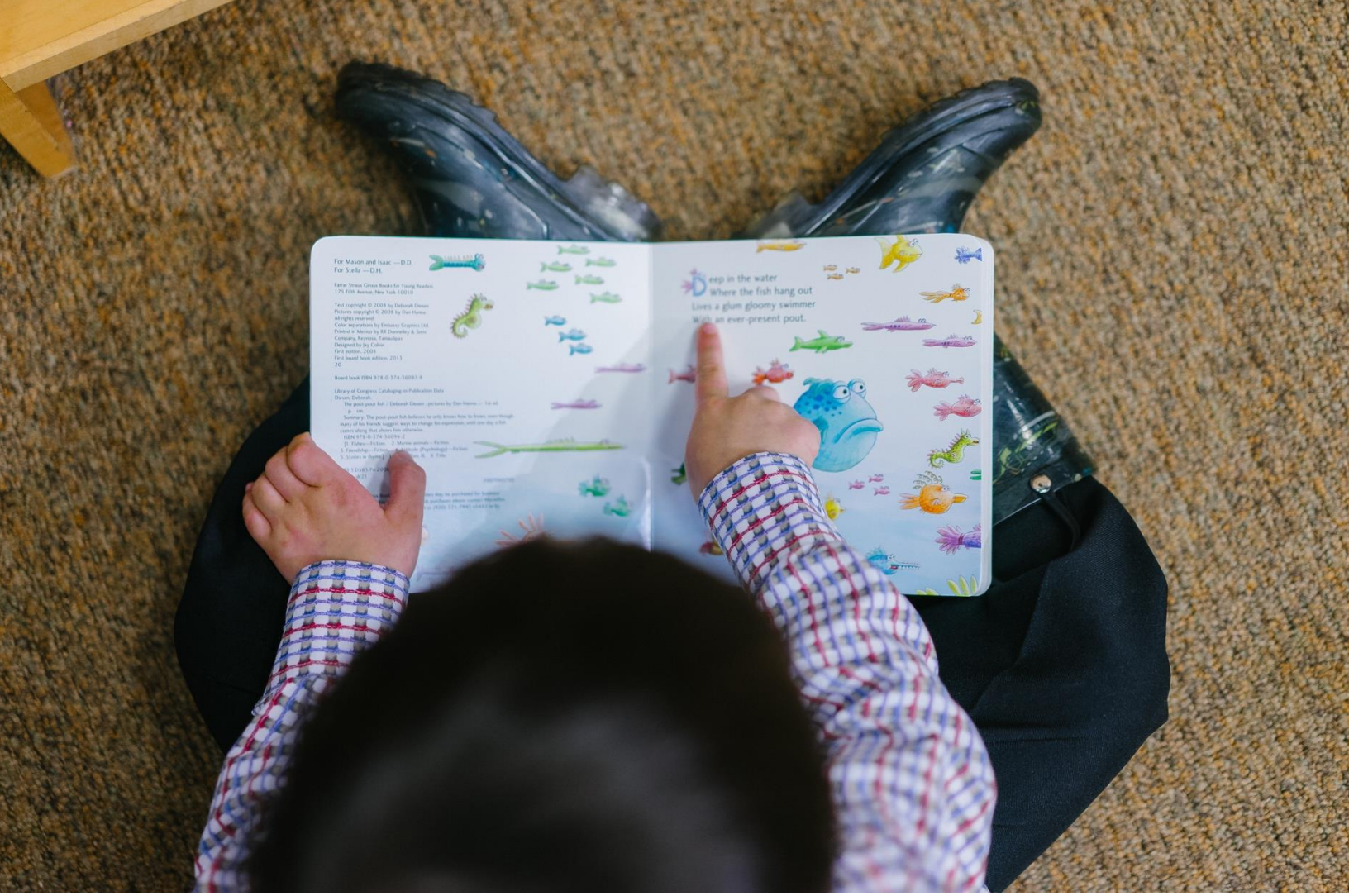
ECAP Commitment: Young children across North Carolina will reach their developmental goals by the time they enter Kindergarten.

COVID-19 and Possible Impacts on Goal 9 Indicators:

- Based on these statistics, there is likely a significant portion of children who were not able to continue effective learning remotely. Disparities may increase as a result of disproportionate disruption of learning due to COVID-19 classroom closures.
- The percent of children who enter Kindergarten at a level typical for their age group may be skewed lower than usual.
- There are likely disparities in family's ability to access teletherapy services.
- The percent of children who receive early intervention services will likely be skewed lower than usual.
- Trauma and stress associated with the pandemic and limited opportunities for social interaction may inhibit growth of social-emotional skills.

Indicator	Data Quality Considerations	Vulnerability
Percent of Children Who Enter Kindergarten at a Level Typical for Their Age Group *Current Data Source: NC Department of Public Instruction*	**Moderate** – Currently unknown how assessments will be conducted for children entering Kindergarten in 2020.	**High** – An entire cohort of children entering Kindergarten in Fall 2020 experienced a loss of pre-school education and diminished socialization opportunities that impact social-emotional and cognitive development.
Percent of Children Enrolled in Medicaid Receiving General Developmental Screening in First 3 Years of Life *Current Data Source: NC Medicaid Child Core Set*	**High** – Data are drawn from Medicaid claims. We do not anticipate that data quality will change in response to COVID-19.	**Low** - We do not anticipate existing efforts will need to be amplified once doctor's offices are open for in-person visits.
Percent of NC Children Who Receive Services through the Infant Toddler Program to Address Developmental Risks and Delays *Current Data Sources: NC Early Intervention Program, NC Division of Public Health, NC DHHS, NC Preschool Exceptional Children, NC Department of Public Instruction*	**High** – Data are drawn from administrative records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate** – Additional efforts may be needed to make up for therapeutic services that could not be delivered through telehealth technology.
Percent of NC Children Who Receive NC Preschool Exceptional Children Services to Address Developmental Risks and Delays *Current Data Sources: NC Early Intervention Program, NC Division of Public Health, NC DHHS, NC*	**High** – Data are drawn from administrative records. We do not anticipate that data quality will change in response to COVID-19.	**Moderate** – Additional efforts may be needed to make up for therapeutic services that could not be delivered through telehealth technology.

Indicator	Data Quality Considerations	Vulnerability
Preschool Exceptional Children, NC Department of Public Instruction		
Percent of NC Children Who Received Services through the Infant Toddler Program, Entered the Program Below Age Expectations in Each Outcome, and Substantially Increased Their Rate of Growth by the Time They Exited the Program *Current Data Sources: NC Early Intervention Branch, NC Division of Public Health, NCDHHS*	**Moderate** – This indicator relies on data from two time points. We do not currently know how many assessments were not completed at the time of entry or exit. Missing data at either time point may limit our ability to draw conclusions about growth rates.	**Moderate** – Additional efforts may be needed to make up for therapeutic services that could not be delivered through telehealth technology.
Percent of Children Who Received Services through the NC Preschool Exceptional Children Program, Entered the Program Below Age Expectations in Each Outcome, and Substantially Increased Their Rate of Growth by the Time They Exited the Program *Current Data Sources: NC Preschool Exceptional Children Program, NC Department of Public Instruction*	**Moderate** – This indicator relies on data from two time points. We do not currently know how many assessments were not completed at the time of entry or exit. Missing data at either time point may limit our ability to draw conclusions about growth rates.	**Moderate** – Additional efforts may be needed to make up for therapeutic services that could not be delivered through telehealth technology or remote learning activities.



Goal 10: Reading at Grade Level

ECAP Commitment: Young children across North Carolina will read on grade level in elementary school, with a particular focus on African American, American Indian, and Hispanic children who face the greatest systemic barriers to reading success.

COVID-19 and Possible Impacts on Goal 10 Indicators:

- EOG, NAEP and mCLASS data will be missing across the state as students did not take EOG or NAEP exams or complete mCLASS assessments in Spring 2020.
- 2021 EOG, NAEP and mCLASS scores may be skewed lower than usual due to the loss of educational time in the previous year and currently unknown changes to the 2020-2021 school year.

Indicator	Data Quality Considerations	Vulnerability
Students Scoring College and Career Proficiency on 3rd - 8th Grade End of Grade Assessments for Reading *Current Data Source: North Carolina Department of Public Instruction*	**Low** – Students did not take End of Grade Exams at the end of the 2019/2020 school year. Data will be missing across the state.	**High** – Students lost three months of in-person education. Disparities in access or ability to effectively engage in remote learning may increase disparities in reading proficiency.
Percent of Students Scoring at or Above Proficiency on 4th Grade NAEP Reading Assessment *Current Data Sources: National Center for Education Statistics, Nation's Report Card*	**Low** – Data will likely be missing across the state.	**High** – Students lost three months of in-person education in Spring 2020. Many school districts are starting the 2020/2021 school year remotely with more structures in place to promote student learning than in Spring 2020. Disparities in access or ability to effectively engage in remote learning may increase disparities in reading proficiency.
Percent of Students Demonstrating Reading Comprehension at or Above Grade Level on mCLASS Reading TRC Assessment in Kindergarten, 1st Grade, and 2nd Grade *Current Data Sources: NC Department of Public Instruction*	**Low** – Data will likely be missing across the state.	**High** – Students lost three months of in-person education in Spring 2020. Many school districts are starting the 2020/2021 school year remotely with more structures in place to promote student learning than in Spring 2020. Disparities in access or ability to effectively engage in remote learning may increase disparities in reading proficiency.
Percent of Families with Children Aged 0-8 Living at or Below 200% Federal Poverty Level *Current Data Sources: American Community Survey, U.S. Census Bureau*	**High** – Data are drawn from the American Community Survey and U.S. Census Bureau. We do not anticipate that data quality will change in response to COVID-19.	**High** – We anticipate that economic impacts from the COVID-19 pandemic will increase the percent of families with young children living at or below the FPL. Poverty is an upstream indicator that increases risk for many other ECAP targets.

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