



NORTH CAROLINA EARLY CHILDHOOD ACTION PLAN: DATA CONSIDERATIONS IN RESPONSE TO COVID-19 PROGRAM AND POLICY CHANGES

GOAL 2: PREVENTIVE HEALTH SERVICES

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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 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. 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 be 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 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
<p>Percent of young children aged 0-15 months and 3-6 years enrolled in Medicaid and Health Choice who receive regular well-child visits.</p> <p><i>Current Data Sources: NC Medicaid, Healthcare Effectiveness Data and Information Set Measures</i></p>	<p>High – Data are drawn from administrative records. We do not anticipate that data quality will change in response to COVID-19.</p>	<p>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.</p>
<p>Percent of Children Aged 0-8 years with Health Insurance</p> <p><i>Current Data Sources: American Community Survey, U.S. Census Bureau</i></p>	<p>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.</p>	<p>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.</p>
<p>Percent of Heads of Household of Children Aged 0-8 years with Health Insurance</p> <p><i>Current Data Sources: American Community Survey, U.S. Census Bureau</i></p>	<p>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.</p>	<p>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.</p>
<p>Percent of 19-35-Month-Old Children Who Are Up-to-Date on Immunizations</p>	<p>High – We do not anticipate that data quality will change in response to COVID-19.</p>	<p>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</p>

Indicator	Data Quality Considerations	Vulnerability
<p><i>Current Data Source: National Immunization Survey</i></p>		<p>of immunizations administered from the end of March through mid-April,¹ so there will need to be some emphasis placed on catching children up on immunizations who missed routine visits due to office closures.</p>
<p>Percent of Children Enrolled in Medicaid or Health Choice Receiving At Least One Dental Service in the Last Year</p> <p><i>Current Data Sources: Dental Quality Alliance Utilization of Services Measures, NC Medicaid</i></p>	<p>High – We do not anticipate that data quality will change in response to COVID-19.</p>	<p>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.</p>
<p>Percent of Children Enrolled in Medicaid or Health Choice Receiving 4 or More Varnishings by 42 Months of Age</p> <p><i>Current Data Source: NC Medicaid</i></p>	<p>High – We do not anticipate that data quality will change in response to COVID-19.</p>	<p>Low – We do not anticipate existing efforts will need to be amplified once doctor’s offices are open for in-person visits.</p>
<p>Percent of Children Ages 1- and 2-years Receiving Lead Screening</p> <p><i>Current Data Sources: NC LEAD Surveillance System, Children’s Environmental Health, Division of Public Health, NCDHHS</i></p>	<p>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.</p>	<p>Low – We do not anticipate existing efforts will need to be amplified once doctor’s offices are open for in-person visits. <i>However, we need additional stakeholder input to understand how children are currently receiving lead screenings and screenings for other environmental toxins.</i></p>
<p>Percent of Families with Children Aged 0-8 Living at or Below 200% Federal Poverty Level</p> <p><i>Current Data Sources: American Community Survey, U.S. Census Bureau</i></p>	<p>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.</p>	<p>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.</p>

References:

1. Santoli JM, Lindley MC, DeSilva MB, Kharbanda EO, Daley MF, Galloway L, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States, 2020. *Morb Mortal Wkly Rep.* 2020;69(19):591–3.