



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

GOAL 1: HEALTHY BABIES

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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 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 from 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 |
|--|---|---|
| <p>Infant Mortality Rate</p> <p><i>Current Data Sources: NCDHHS, State Center for Health Statistics</i></p> | <p>High – Data are drawn from vital records. We do not anticipate that data quality will change in response to COVID-19.</p> | <p>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.</p> |
| <p>Percent of Babies Born at a Low Birth Weight</p> <p><i>Current Data Sources: State Center for Health Statistics, DPH, NCDHHS</i></p> | <p>High – Data are drawn from vital records. We do not anticipate that data quality will change in response to COVID-19.</p> | <p>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.</p> |
| <p>Percent of Pregnancy Intendedness</p> <p><i>Current Data Sources: PRAMS, State Center for Health Statistics, DPH, NCDHHS</i></p> | <p>High – Data are based on PRAMS survey questions. We do not anticipate that data quality will change in response to COVID-19.</p> | <p>Low – We do not anticipate that additional long-term efforts will need to be made in response to COVID-19 to meet this target.</p> |
| <p>Percent of Women Aged 18-44 Years Who Had Routine Preventive Health Visit in Past Year</p> <p><i>Current Data Sources: BRFSS, State Center for Health Statistics, DPH, NCDHHS</i></p> | <p>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.</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. Additional efforts may be needed to address disparities in who is able to access preventive health care through telehealth technology.</p> |

| Indicator | Data Quality Considerations | Vulnerability |
|---|--|---|
| <p>Percent of Infants Ever Breastfed, Breastfed at 6 Months</p> <p><i>Current Data Sources: National Immunization Survey, CDC</i></p> | <p>High – Data are drawn from the National Immunization Survey. We do not anticipate that data quality will change in response to COVID-19.</p> | <p>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.</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:

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2. Centers for Disease Control and Prevention. Coronavirus Disease 2019: If You Are Pregnant, Breastfeeding, or Caring for Young Children [Internet]. 2020 [cited 2020 Jun 12]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html>
3. Lima SAM, El Dib RP, Rodrigues MRK, Ferraz GAR, Molina AC, Neto CAP, et al. Is the risk of low birth weight or preterm labor greater when maternal stress is experienced during pregnancy? A systematic review and meta-analysis of cohort studies. *PLoS One.* 2018;13(7):1–16.
4. Becker A, Blaxill M. Lessons from the Lockdown: Why are so many fewer children dying? [Internet]. 2020. Available from: <https://www.rescuepost.com/files/lessons-from-the-lockdown-vf-6-17-20---new-layout.pdf>