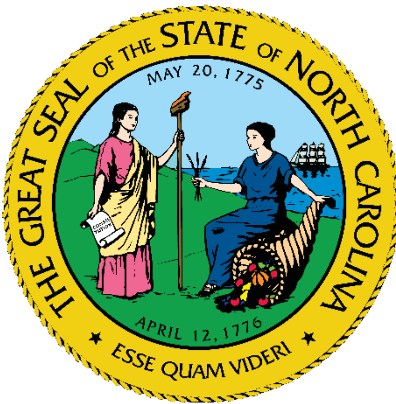

Tele-Transformation in North Carolina: Telehealth Policy Lessons Learned During the COVID-19 Pandemic and Beyond

North Carolina Department of Health and Human Services

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Executive Summary

The COVID-19 pandemic catalyzed a dramatic rise in the use of telehealth nationwide to deliver services to Medicaid and Children's Health Insurance Program (CHIP) members. The federal government and states implemented temporary policy flexibilities in response to the COVID-19 pandemic to increase access to care and limit risk of viral exposure by allowing members to receive telehealth services in their homes. The North Carolina Department of Health and Human Services ("the Department") took early action to promote evidence-based, equitable delivery of Medicaid and CHIP services via telehealth during the COVID-19 pandemic and has transformed its telehealth policy based on this experience.

The Department's pre-COVID-19 pandemic telehealth policy, similar to some states, was restrictive and allowed only limited reimbursement for telehealth services. At the onset of the COVID-19 pandemic, the Department-led COVID-19 telehealth response team engaged partners from across the state and within the Department to implement immediate, foundational policy changes needed to enable remote access to care. The Department developed a set of criteria to guide ongoing pandemic-related policymaking, leveraged partnerships to provide technical assistance to providers, implemented a robust communications strategy to adapt to changing needs on the ground, and expanded internal data analytic capabilities to monitor the impact of policy changes on telehealth utilization, cost, and quality of care.

At the end of 2020 and into early 2021, the Department began considering which telehealth flexibilities to continue beyond the COVID-19 pandemic in order to 1) increase the safety of care for members who continued to face higher risk of complications from COVID-19; and 2) create predictability for providers who were concerned about investing in telehealth if reimbursement would be time-limited. Permanent decisions were made through a formalized telehealth policy decision-making process that considered new and additional criteria for policymaking, such as the state's telehealth utilization data and community feedback. Ultimately, many of the policy flexibilities implemented during the COVID-19 pandemic were integrated into permanent policy as a result of this process.

North Carolina's experience during the COVID-19 pandemic forever changed the way the Department approached policymaking. Factors that supported the successful evolution of the state's telehealth policy include the Department's decisive leadership; unique partnerships that supported practice adoption of new care delivery modalities and billing processes; commitment to a transparent, multifaceted communications campaign; and a focus on telehealth utilization data collection and evaluation.

Looking ahead, the Department is focusing on several priorities and challenges that pose a barrier to further integration of telehealth into the Medicaid delivery system, including ensuring equitable access to telehealth services, maintaining the highest quality of care for services delivered via telehealth, supporting hybridized models that feature multiple telehealth modalities, and understanding the workforce implications of telehealth use. However, the Department is well positioned to leverage the policymaking framework and supporting infrastructure developed during the COVID-19 pandemic to overcome emerging barriers to telehealth care delivery in the future.

I. Background

National Trends in Telehealth Use Prior to and in Response to the COVID-19 Pandemic

The COVID-19 pandemic[1] catalyzed a dramatic rise in the use of telehealth nationwide. The national rate of Medicaid and CHIP outpatient services delivered via telehealth rose over 3,000% from March 2020 to February 2022, when social distancing measures limited members' ability to receive care in person. Telehealth utilization rates across the United States have declined since the peak COVID-19 pandemic period but remain significantly higher than pre-pandemic levels.

Prior to the COVID-19 pandemic, all 50 states and the District of Columbia allowed certain Medicaid covered services to be delivered via telehealth, but coverage varied widely by state. Most states offered telehealth coverage for primary care and behavioral health services, but fewer than half covered telehealth delivery of physical, occupational, and speech therapy; maternity care; and long-term services and supports. Reimbursement was unclear in some cases and generally lower than that for comparative in-person services. Additionally, policies typically included restrictions on eligible services, modalities, providers, and originating and distant site settings.[2]

At the onset of the COVID-19 pandemic, the federal government and states rapidly implemented temporary policy flexibilities to increase access to care and limit risk of

Key Definitions

The following are relevant definitions included within North Carolina Medicaid's telehealth policy and used throughout this document:

Telehealth: Telehealth is the use of two-way real-time interactive audio and video to provide and support health care services when participants are in different physical locations.

Virtual Communications: The use of technologies other than video to enable remote evaluation and consultation support between a provider and a member or a provider and another provider. Covered virtual communication services include telephone conversations (audio only); virtual portal communications (secure messaging); and store and forward (transfer of data from member using a camera or similar device that records (stores) an image that is sent by telecommunication to another site for consultation).

Remote Patient Monitoring: The use of digital devices to measure and transmit personal health information from a member in one location to a provider in a different location. Remote patient monitoring enables providers to collect and analyze information such as vital signs (blood pressure, heart rate, weight, blood oxygen levels) in order to make treatment recommendations. The definition includes both (1) manual self-measurement and reporting of vital signs; and (2) remote physiologic monitoring (i.e., physiologic data is wirelessly synced from a digital device so that it can be evaluated immediately or at a later time by a provider).

Originating Site: Where the member is located, which may be a health care facility, school, community site, the home, or wherever the member may be at the time they receive services via telehealth, virtual communications, or remote patient monitoring.

Distant Site: Where the provider is located.

[1] The federal public health emergency for COVID-19, declared on January 31, 2020, expired on May 11, 2023.
[2] For example, fewer than half of states allowed patients to access services from their homes, and most states prohibited use of audio-only telephonic services.

viral exposure. Many federal regulatory actions paved the way for state-level changes. The Centers for Medicare & Medicaid Services (CMS) quickly implemented a number of Medicare telehealth policy changes that were replicated in nearly all states over the course of the COVID-19 pandemic, including:

- Lifting the geographic restriction that members must be located in a rural area;
- Allowing both new and established patients to receive telehealth services;
- Permitting members to receive telehealth services in their homes;
- Enabling federally qualified health centers (FQHCs) and rural health centers (RHCs) to serve as eligible distant sites;
- Adding coverage and payment for audio-only forms of telehealth;
- Allowing a broader range of providers to deliver telehealth services (e.g., clinical social workers, certified nurse midwives, nutrition professionals); and
- Expanding Medicare telehealth coverage to more than 100 additional services.

Additional federal policies that facilitated state action included the following:

- CMS offered an accelerated approval process for state plan amendments (SPAs) related to telehealth;
- The Office of Civil Rights agreed not to impose penalties for Health Insurance Portability and Accountability Act (HIPAA) noncompliance in connection with the good faith provision of telehealth during the COVID-19 pandemic, which facilitated use of common technology platforms (e.g., FaceTime) to communicate with patients; and
- The Drug Enforcement Administration waived in-person medical evaluation requirements for prescriptions of controlled substances delivered via telehealth visits.

North Carolina took early action to promote evidence-based, equitable delivery of Medicaid and CHIP services via telehealth during the COVID-19 pandemic. This policy evaluation brief highlights North Carolina's innovative and rapid adaptive approach to telehealth policymaking, both in response to the pandemic and thereafter, to serve as a model to other states undertaking telehealth policymaking and evaluation. This brief includes (1) an overview of North Carolina's evolution in telehealth policy; (2) the state's decision-making criteria used to determine temporary and permanent telehealth policy changes; (3) key findings from the state's evaluation of telehealth utilization between March 2020 and December 2022 (with additional detail included in the companion chart pack); and (4) considerations for other states.

Telehealth Policy and Trends in North Carolina Prior to the COVID-19 Pandemic

The Department's pre-COVID-19 pandemic telehealth policy was restrictive relative to that of other states and allowed reimbursement for only a narrow set of provider-site-to-provider-site telehealth encounters. There were several notable barriers within the pre-COVID-19 pandemic telehealth policy, including originating site restrictions that prohibited members from participating in a telehealth visit

from their homes and requiring members to travel to Medicaid-enrolled sites to receive telehealth care. Due to these barriers, telehealth use among the state's Medicaid and CHIP members accounted for a negligible proportion of total claims.

Leading up to 2020, there was pressure on the Department to expand and modernize its Medicaid telehealth policy in light of rural access issues and technological advancements; however, concerns related to program integrity and potential overutilization hindered progress. In late 2019, the Department formed a cross-Department group to revisit the policy and align with other states that were adopting more expansive telehealth coverage policies as well as to consider a strategy for supporting rural safety net providers' participation in telehealth. This renewed policymaking effort was also informed by the state's Medicaid managed care transformation as the Department sought to provide health plans and providers with additional flexibility to deliver care in order to drive improved quality and health outcomes. The group's discussions laid the foundation for many of the telehealth policy revisions implemented during the COVID-19 pandemic.

II. North Carolina's Approach to Telehealth Policy Design

At the Onset of the COVID-19 Pandemic

Policymaking

In response to Governor Roy Cooper's declaration of a state of emergency on March 10, 2020, and subsequent stay-at-home order on March 27, a Department-led COVID-19 telehealth response team, led by Dr. Shannon Dowler, the state Medicaid program's chief medical officer, engaged partners from across the state and within the Department to implement immediate, foundational policy changes needed to enable remote access to care, including:

- Eliminating restrictions on originating sites (including that the originating site could be the patient's home) and distance requirements between originating and distant sites;
- Enabling coverage of virtual patient communication services (e.g., telephone assessment and management, portal communications) and interprofessional consultations; the definition of "interprofessional consultations" was expanded to include attending physician consultations with physicians in the same specialty;
- Allowing services to be delivered via any HIPAA-compliant, secure technology

Innovative Telehealth Models Implemented by the Department During the COVID-19 Pandemic

Perinatal Telehealth: The Department enabled perinatal providers to provide antepartum, postpartum, and medical lactation care to members using telehealth. Additionally, the definition of "durable medical equipment" (DME) was expanded to include blood pressure monitoring devices and scales to provide enhanced pregnancy surveillance. Eligible providers could conduct postpartum depression screenings via a telehealth visit, telephonic visit, or online patient portal communication. The Department also relaxed Pregnancy Medical Home requirements to encourage providers to complete a Pregnancy Risk Screening form at any time, using any modality.

- Impact: Nearly 1,600 perinatal telehealth claims were filed in 2020.

Telehealth with Simultaneous Home Visit: The Department provided reimbursement for a unique hybrid telehealth-home visit model. Under this care model, a delegated staff person provides chronic disease management, well-child services, perinatal care, COVID-19, or other testing (e.g., urinalysis), and/or vaccinations in the home while the distant site provider (e.g., physician, nurse practitioner) observes and guides the staff person via telehealth.

- Impact: More than 550 hybrid telehealth-home visit claims were filed in 2020.

Hospital-at-Home (HAH): The Department launched the HAH program in September 2021 as an expansion of the CMS Hospital Without Walls initiative. HAH allows certain health care services to be provided outside a traditional hospital setting and within a patient's home. Members receive home visits from nurses and paramedics and have electronic monitoring at their bedsides for vital signs such as blood pressure and pulse.

- Impact: Nearly 250 HAH claims were filed over the course of the COVID-19 pandemic; over half of claims for HAH admissions were for COVID-19 diagnoses.

with audio and video capabilities, including (but not limited to) smartphones, tablets, and computers;

- Eliminating the restriction that telehealth services cannot be conducted via “video cell phone interactions;”
- Removing the requirement for members to obtain prior authorization or have an initial in-person examination prior to receiving most telehealth services;
- Eliminating initial evaluation and referral requirements, and the need for oversight by a consulting provider during the provision of telehealth services;
- Allowing FQHCs and RHCs to serve as eligible distant sites; and
- Clarifying that telehealth services would be reimbursed at parity with services delivered in person.

The response team met daily starting in late March 2020 to review the list of Medicaid-covered services and determine the specialty areas and specific services that could be delivered via telehealth (or other virtual modalities) during the COVID-19 pandemic (see Appendix Exhibit 1 for more detail). The response team issued 22 telehealth-related Medicaid Provider Bulletins between March and June 2020, which temporarily expanded the eligible services and providers for telehealth broadly.[3] The Department simultaneously disseminated billing and care delivery guidance to providers.

The Department also implemented novel flexibilities related to DME and prescription medication that enabled members to receive whole-person care from their homes. For example, the Department added coverage for providers to supply members receiving telehealth services with automatic blood pressure monitors, portable pulse oximeters, and weight scales without prior authorization. This temporary expansion of the Department’s DME policy helped providers monitor the health of various patient populations who were receiving telehealth care from home, including (but not limited to) members receiving perinatal care. Additionally, members were able to complete early refills of their medications, and providers were encouraged to prescribe up to a 90-day supply of medications (including both preferred and nonpreferred medications), including for those receiving treatment for attention deficit hyperactivity disorder (ADHD) and opioid use disorder (OUD).[4] Medication by mail and delivery reimbursements were allowed for the first time in North Carolina Medicaid history.

COVID-19 Pandemic-Related Policymaking Criteria

The response team relied on a combination of internal and external community feedback (described further below) as well as the following policymaking criteria and guiding questions in Table 2 to make telehealth coverage and reimbursement decisions during the early COVID-19 pandemic period.

[3] By November 2020, the Department had implemented 135 telehealth flexibilities across the bulletins, spanning nearly 500 service codes.
[4] This flexibility did not apply to any other controlled substances.

Table 2. COVID-19 Telehealth Policymaking Criteria

Criteria	Guiding Questions
Continuity of Care During Stay-at-Home Orders	• Will enabling coverage of this service via telehealth allow continued access to care while members are isolating at home? • Will members' health outcomes be negatively impacted if telehealth coverage is not enabled?
Standard of Care and Patient Safety	• Can the components of the service be delivered safely via telehealth while meeting the standard of care? • Are there portions of this service that require the provider to conduct a physical exam or otherwise touch the patient (e.g., immunizations)? If so, is there an alternative to this service (e.g., separating the well-child visits into two components)? • Can physical components of the visit be delivered separately (e.g., in a parking lot, through remote patient monitoring devices) while the remainder is conducted via telehealth? • Can the provider obtain the peripheral data necessary to meet the standard of care when delivering the service via telehealth (e.g., use a home blood pressure monitoring device to provide heart rate and blood pressure or home scale to provide weight)?
Member Participation and Health Equity	• Is the member (and/or their caregiver) able to meaningfully participate in the telehealth visit (e.g., technology/broadband access and digital literacy, cognitive or physical limitations, language barrier)? • Can the service be delivered equitably to all populations, particularly to groups that have been historically marginalized? • Is there a risk of exacerbating health inequities in the provision of a new remote service?
Member Confidentiality and Privacy	• Can the service be delivered via telehealth in accordance with client confidentiality/HIPAA privacy rules? • Where does the liability fall when providing a service remotely as it relates to privacy (e.g., group visits)?
Evidence Base	• Is there an established evidence base that supports delivery of the service via telehealth? • In the absence of an evidence base, is there a recognized standard of care?
Alternative Modalities	• If the member is unable to access the service via telehealth, can the service be delivered via virtual communication modalities (e.g., audio-only, portal communications) while still meeting the standard of care?
Federal, State and Specialty Society Coverage and Guidance (once available)	• Was the service covered by Medicare and/or other state Medicaid programs via telehealth during the pandemic? Did the Substance Abuse and Mental Health Services Administration (SAMHSA), other federal agencies, or medical professional and specialty groups issue guidance related to enabling coverage of this service via telehealth?

Communications and Community Engagement

In parallel to the policymaking effort, the Department established a robust communications network in partnership with the North Carolina Area Health Education Centers (AHEC) to inform providers of all pandemic-related flexibilities, including temporary telehealth policy changes. As practices transitioned to different stages of care delivery during the COVID-19 pandemic, from all virtual to parking lot care delivery to hybrid care, the Department and AHEC facilitated weekly (and in some cases daily) statewide webinars to share information on telehealth and other COVID-19 pandemic-related topics.[5] By November 2020, the Department had hosted 114 provider webinars, engaging over 49,000 attendees. This modality created a "new normal" for the state to have a direct conduit to providers to provide updates and receive feedback on a monthly basis through virtual, staff-led "Back Porch Chats." The Department frequently added or amended telehealth flexibilities in response to feedback collected by North Carolina's medical professional groups, such as the North Carolina Medical Society, North Carolina Pediatric Society, North Carolina Academy of Family Physicians, North Carolina Psychiatric Association, and others. These professional groups were a conduit between the Department and practices, collecting questions and suggestions for the Department's response through various communication outlets. The Department also created a public-facing Telehealth Billing and Coding Summary, which included a comprehensive list of all telehealth-eligible services along with guidance to support providers as they acclimated to new telehealth billing codes and processes. For all payers in North Carolina, this document is still continually updated to reflect permanent coverage decisions.

Hotspotting Initiative

In light of data showing that certain counties and populations in the state were disproportionately impacted by COVID-19 and lacked access to telehealth services, the Department's Data and Reporting team studied the uptake and impact of telehealth and created a "hotspot" map to help Practice Support teams run by contracted partners, AHEC, and Community Care of North Carolina (CCNC). The Department also deployed 250 community health workers to connect members to medical and social support resources, including diagnostic testing, primary care, case management, nutrition assistance, and mental health services in hotspot areas.

The Department regularly communicated with teams in the Office of Rural Health, Department of Public Health, and Department of Mental Health, Developmental Disabilities and Substance Abuse Services to identify areas where additional policymaking or guidance was needed. For example, the Office of Rural Health flagged action items for the Department based on conversations with federal partners related to RHC and FQHC policy and advocated to ensure federal and state dollars were allocated to expand broadband connectivity to rural providers. The Department's swift action led the way for other payers across the state to update their telehealth policies, and the Department worked closely with the North Carolina Payers Council to promote consistency across payers.

[5] AHEC, with support from the Department, also conducted targeted, intensive engagement with a small number of independent and small group practices to help them design effective telehealth workflows, select telehealth software and platforms, and integrate telehealth into their electronic health record systems.

Data Utilization and Monitoring

Early in the COVID-19 pandemic, the response team recognized the importance of expanding the Department's analytic capacity to measure and socialize the impact of the state's pandemic-related telehealth flexibilities. The Department created an extensive internal utilization dashboard based on claims data that differentiated provider type (e.g., medical, behavioral, speech), service type (e.g., telehealth vs. telephonic), and geography (e.g., county of service). This tool also allowed insight into member access, and data could be stratified by important demographic characteristics such as race and ethnicity. Additionally, in partnership with Community Care of North Carolina (CCNC) and the University of North Carolina Sheps Center for Health Services Research, the Department leveraged multiple data resources developed internally and with other state partners[6] to understand changes in telehealth utilization, cost, and quality of care for Medicaid members. The analytic team created an evaluation plan prior to launching the first set of temporary telehealth policy changes, with three primary aims: (1) summarize telehealth utilization for members and providers during the COVID-19 pandemic; (2) identify whether the state's policy flexibilities impacted subsequent in-person care and patient outcomes (escalation to emergency department or admission, impacted total cost of care); and (3) determine whether telehealth ultimately improved access to care, especially for special populations and services (e.g., behavioral health, long-term services and supports, racial and ethnic minorities, rural communities).[7] The Department also reviewed findings from provider and consumer surveys administered by AHEC, the Office of Rural Health, and others to incorporate qualitative feedback and identify ongoing issues in advance of receiving claims data.

The Department's compliance team developed a list of utilization flags to identify potential telehealth billing outliers, including telehealth claims that overlapped with inpatient stays or in-person services provided the same day; services that were provided for longer than the time indicated in the billing code description; and provider practices that demonstrated utilization significantly higher than peer practices or as compared with pre-COVID-19 pandemic in-person service utilization. Any flagged outliers were referred to the Department's investigations team, and investigation was undertaken as appropriate. Most outliers could be attributed to provider billing error, and the Department responded by issuing clarifying guidance. At the time of this publication, the Department had not uncovered any incidents of major suspected fraud resulting from telehealth policy expansions, but the evaluation will continue. Additionally, the Department is in the process of studying the Hospital-at-Home program and its impact on Medicaid members to inform whether future service provision will be considered.

Thinking Beyond the COVID-19 Pandemic

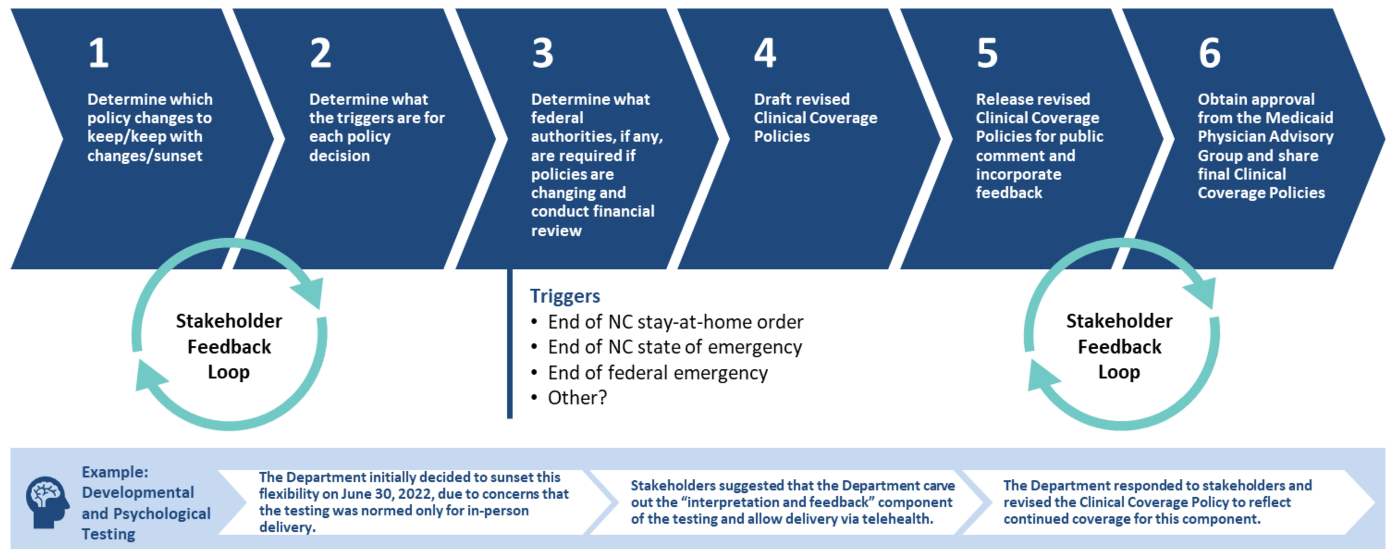
At the end of 2020 and into early 2021, the Department began considering which telehealth flexibilities to make permanent based on findings gathered through the Department's analytics and compliance efforts as well as community feedback. Uncertainty prevailed in the field about committing to and developing a telehealth infrastructure, based on whether services would continue to be reimbursed. Additionally, provider anxiety about whether they would have advance notice to modify systems based on the undetermined end of the state of emergency was a point of significant concern. For these

[6] For example, the Office of Rural Health, CCNC, and the Department of Information Technology, which houses the state's health information exchange.

[7] All analyses were benchmarked against pre-COVID-19 pandemic data.

reasons, an early process was initiated to make permanent policy decisions through a standardized decision-making process, whereby the Department's subject matter experts determined whether to (1) keep, (2) keep with modifications, or (3) sunset each flexibility (see Figure 1 and Appendix Exhibit 3).

Figure 1. The Department's Iterative Telehealth Policy Decision-Making Process



To guide the telehealth policy decision-making process, the Department built on the COVID-19 pandemic-related criteria to create a new set of permanent telehealth policymaking criteria (see Table 2 below). Unlike the pandemic-related criteria, which focused on enabling continuity of care during the stay-at-home order, the permanent criteria evaluate whether telehealth delivery is substantially equivalent to in-person delivery and consider new quality, legal, compliance, and fiscal questions outside an emergency period. Further, the permanent criteria reflect the value of data and community feedback obtained during the COVID-19 pandemic. The critical gating impact of services' ability to drive or hinder health equity was a consistent focus.

Key questions involved in permanent policymaking evolved to incorporate new considerations, as shown below.

Table 2. Permanent Telehealth Policymaking Criteria

Criteria	Guiding Questions
Continuation of COVID-19 Pandemic-Related Criteria	
Standard of Care and Patient Safety	• Can the components of the service be delivered safely and effectively via telehealth while meeting the standard of care?
Member Participation and Health Equity	• Is the member (and/or their caregiver) able to meaningfully participate in the telehealth visit (e.g., technology/broadband access and digital literacy, cognitive or physical limitations)? • Can the service be delivered equitably to all populations, particularly to groups that have been historically marginalized?
Member Confidentiality and Privacy	• Can the service be delivered via telehealth in accordance with client confidentiality/HIPAA privacy rules?

Criteria	Guiding Questions
Evidence Base	• Is there an established evidence base that supports delivery of the service via telehealth?
Criteria for Permanent Policymaking	
Service Modality	• Is the quality of care the highest when provided in-person, or can an equivalent quality of care ultimately be delivered via telehealth or telephonic modalities?
State Medicaid Requirements and Quality Goals	• Outside of a public health emergency, do federal Medicaid rules require the service to be provided in a specific location or manner? • Does enabling coverage of this service via telehealth align with or advance the state's goals related to delivery of the service (i.e., in alignment with the state's Quality Strategy aims, goals, and objectives)?
Regulatory and Compliance Considerations	• Are there regulatory limitations on continued delivery of the service via telehealth? • Does telehealth delivery of the service align with the Department's compliance and monitoring activities? • Does the Department need to submit a SPA to permanently authorize the service?
Fiscal Considerations	• Is there a fiscal impact of allowing continued delivery of the service via telehealth?
Community Feedback	• Are providers, members, or other partners requesting continued permanent coverage of the service via telehealth? If so, is the added cost warranted by the added value? • Did providers, members, or other partners raise concerns about telehealth delivery of this service during the COVID-19 pandemic?
State-Specific Utilization Data	• What did utilization data during the COVID-19 pandemic demonstrate about delivery of the service via telehealth? • Do the findings from the Department's ongoing telehealth data analyses support ongoing permanent coverage of this service via telehealth?

The Department posted for public comment revised versions of all Clinical Coverage Policies to reflect permanent policy changes resulting from the telehealth policy decision-making process, and reviewed nearly 30 comments before finalizing the policies. Ultimately, over 30% of the policy flexibilities (and more than 50% of the telehealth-specific flexibilities) implemented during the COVID-19 pandemic were integrated into permanent policy (see Appendix Exhibit 2).[8] Specifically, the Department allowed providers to offer, on a permanent basis, telehealth delivery of outpatient evaluation and management services at parity, select behavioral health services, telephone evaluation and management services, interprofessional consultations, remote patient monitoring, and select specialty services (e.g., maternal health and family planning, diabetes education and management). Temporary telehealth-eligible services that the Department sunsetted included outpatient specialized therapies, optometry, unrestricted telephonic care, fully remote well-child services, most in-home and facility-based intensive behavioral health program services, and skilled nursing facility/hospice services.

[8] In the event of a future public health emergency, the Department streamlined the process of turning appropriate temporary flexibilities on or off quickly. For example, needed systems changes can be made in larger batches to enable efficient processing and reprocessing of claims.

Looking Ahead

Ongoing telehealth policy maturation will be guided by a Statewide Telehealth Work Group housed in the Office of Rural Health, whose membership largely comprises the same individuals and organizations that were involved with the Department's COVID-19 telehealth response team.

The Work Group's telehealth recommendations will be informed by review of emerging evidence related to telehealth service delivery in external literature and review of internal telehealth utilization data using a dashboard created by the analytic team as well as community feedback. The dashboard also generates routine analytics to capture potential compliance issues for deliberation by the Work Group. Separately, to bolster the Department's monitoring activities related to telehealth, the Department is increasing the percentage of telehealth claims it reviews as part of its regular compliance processes in order to confirm members received services and to solicit feedback.

The Department recognizes the important role that community engagement and input have played in its telehealth policy evolution to date and how critical that feedback was early in the pandemic. As a result, the Department established a public-facing online portal where the community can submit clinical coverage recommendations to Medicaid for consideration. Additionally, the Department will continue to provide resources to patients and providers through a telehealth-specific webpage on the Department's website.

The Work Group's first priority focus area is addressing the digital divide by, for example, developing policies and initiatives to improve technological literacy. This work will dovetail with the efforts of the newly created Office of Digital Equity in the North Carolina Department of Information Technology, which will execute Governor Cooper's plan to expand digital offerings and partnerships across North Carolina. Finally, in alignment with ongoing efforts to implement Medicaid expansion in the state, there is a focus on improving access to care through the use of innovative modalities and eradicating the digital divide.

III. Demonstrating the Impact of North Carolina's Telehealth Policy Expansions

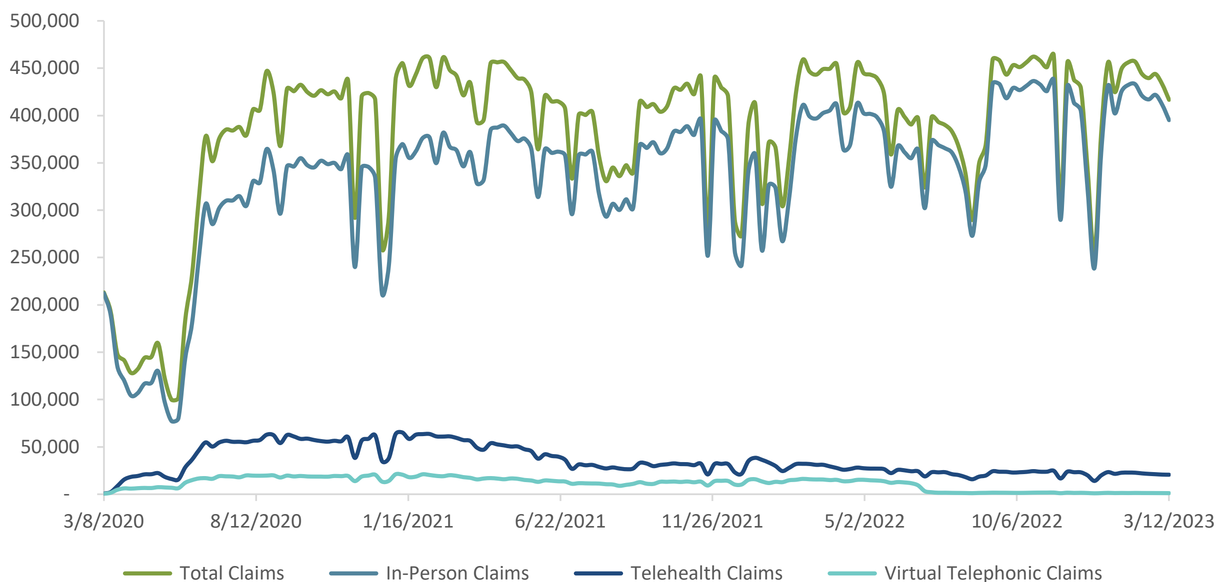
The Department's investment in building its analytic capacity during the COVID-19 pandemic has enabled Department leadership to make data-informed telehealth policy decisions and understand the value of and continued challenges associated with telehealth. Key findings from the Department's telehealth utilization analyses conducted to date are discussed below. See the companion chart pack for further information and detailed charts illustrating the complete set of findings.

Overall Utilization and by Key Demographic Groups

As expected, telehealth claims volume increased dramatically during the first few months of the COVID-19 pandemic as telehealth replaced in-person care (see Figure 2). By the week of April 19, 2020, in-person primary care claims were down 56% and telehealth professional claims had increased nearly 3,000% from the beginning of March (an increase from 1,890 to 57,857 claims). Professional claims for telephonic care in the same time frame increased to 17,613 from zero. Behavioral health and primary care experienced the highest proportion of claims delivered via telehealth, climbing to approximately 19% of claims by mid-April.

Telehealth utilization varied by age, race/ethnicity, and other demographic categories through 2022. Members under age 20 were the highest utilizers of telehealth through 2020 and early 2021. Thereafter, members between age 21 and 44 utilized telehealth at similar or higher rates than that of members under age 20 (see chart pack). Demographic groups that used telehealth less frequently include adults over age 65 and Black, Hispanic, and rural members (discussed further below and in the companion chart pack).

Figure 2. Telehealth, Telephonic, and In-Person Claims Volume (March 2020 - March 2023)

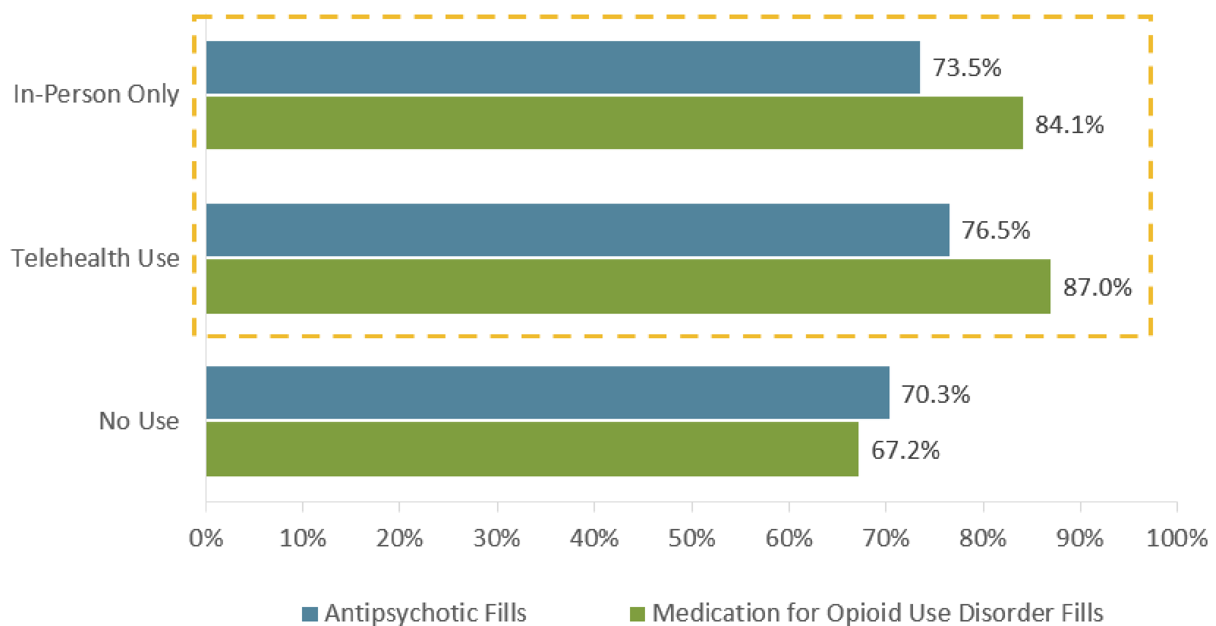


Access and Utilization Impact

The COVID-19 pandemic highlighted the critical role telehealth played in maintaining members' access to care, particularly for those with chronic disease and behavioral health needs. To illustrate, primary care practices that utilized telehealth at higher rates saw a larger proportion (76%) of their enrolled Medicaid patients during the first five months of the COVID-19 pandemic compared with practices that did not utilize telehealth (29%).

Telehealth may have helped members maintain access to care for conditions that require ongoing monitoring. For example, the odds of telehealth utilization among members with a chronic disease were almost three times greater than among members without a chronic disease. In addition, members who accessed care via telehealth were more likely to fill their antipsychotic (77%) or OUD (87%) medications, as compared to individuals who accessed in-person care (74% for antipsychotics, 84% for OUD) or no care (70% for antipsychotics, 67% for OUD), respectively (see Figure 3).

Figure 3. Relationship Between Modality of Care and Filling of Prescriptions for Antipsychotic and Opioid Use Disorder Medications (2020)



Despite initial concerns that telehealth might result in overutilization of services, outpatient care provided via telehealth was not correlated with increased acute care utilization compared with in-person services during the COVID-19 pandemic, though findings were mixed for telephonic care. Findings also show that (1) a lower proportion of members had a second primary care claim within 14 days when their initial visit was telehealth, and there tended to be more time between visits (unless the person had COVID-19); and (2) there was no measurable impact on total cost of care for non-aged, blind and disabled (ABD) members who received telehealth or telephonic care within 14 days of their initial visit when compared to in-person care. Costs of care within 15 days after a telehealth visit were expectedly higher for ABD members broadly, suggesting that telehealth did not result in cost savings for ABD members. However, this finding may be due to higher health risks experienced by this population.

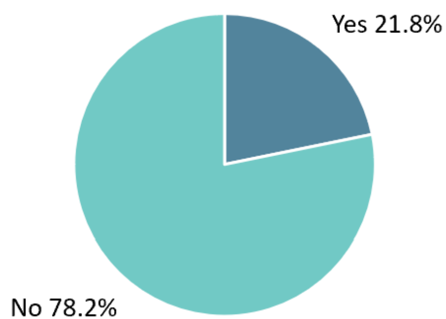
Member Experience and Equity

According to the 2022 Consumer Assessment of Health Providers and Systems Survey (CAHPS), the majority of members expressed satisfaction with care delivered via telehealth. When offered telehealth care, 83% indicated at least some interest in using telehealth instead of an in-person appointment. Further, nearly all members reported high rates of confidence that they knew how to take care of their health and that they received answers to their questions as a result of the telehealth visit (see Figure 4).

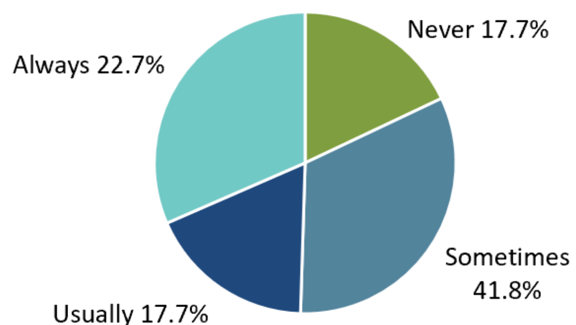
Utilization data and CAHPS survey data, however, show persistent disparities in the provision of telehealth care by race and ethnicity. Utilization data featured in the companion chart pack shows a lower relative probability of telehealth use among Black (between 1.01 and 1.39 lower odds) and Hispanic members (between 2.97 and 3.48 lower odds) over the course of the COVID-19 pandemic compared with non-Black and non-Hispanic members. CAHPS data highlights important gaps in offer rates for Black and Hispanic enrollees. When asked whether they were offered a telehealth instead of an in-person appointment, there was a meaningful (though not statistically significant) gap between offer rates for Black and White members (19.1% and 24.1%, respectively). Further, 22.5% of non-Hispanic respondents answered affirmatively, compared with 14.6% of Hispanic respondents, likely reflecting language barriers to telehealth use (see Figure 5). More research is needed to understand the root causes of differential offering of telehealth services by providers.

Figure 4. Telehealth Supplemental Items on the CAHPS Survey, 2022

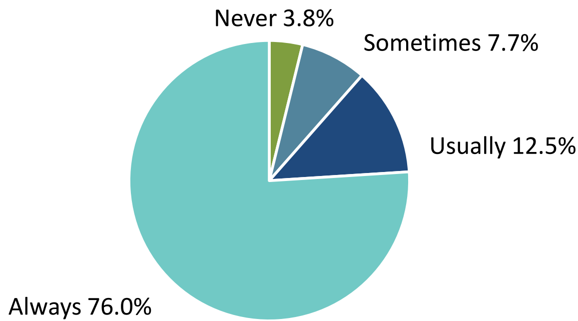
Respondents Offered Telehealth Instead of an In-Person Appointment



Respondents Who Utilized Telehealth When Offered



How Often Were Members' Questions Answered?



How Often Did Members Report Comfort About How to Take Care of Health at the End of the Visit

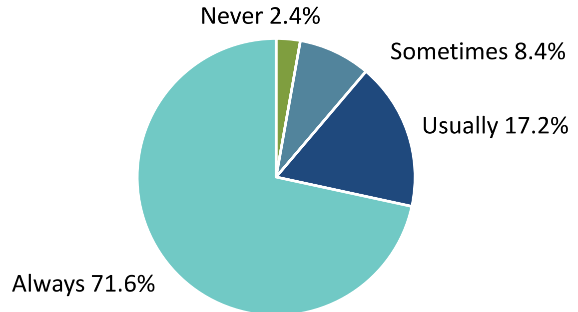
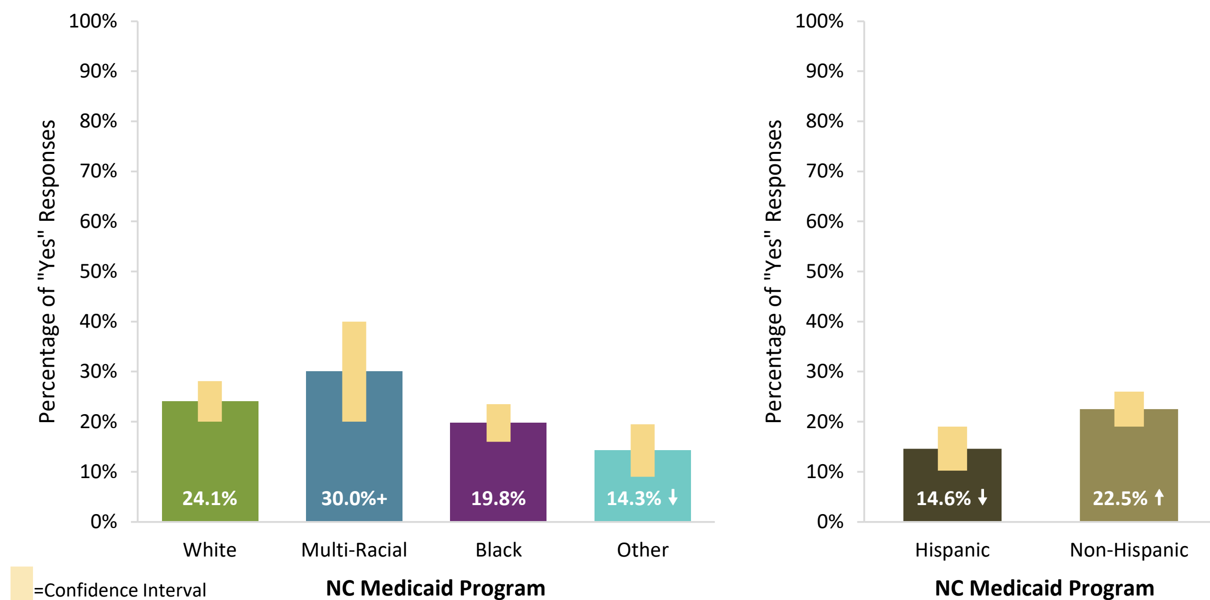


Figure 5. Respondents Who Were Offered Telehealth Instead of In-Person Appointment for North Carolina Medicaid Program, by Race and Ethnicity (2022) [Question: In the last 6 months, were you offered a telehealth appointment instead of an in-Person appointment?]



↓ Indicates the demographic category score is significantly lower than the score of White.
If no significant differences were found, no indicator appears on the figure.
+ Indicates fewer than 100 responses. Caution should be exercised when evaluating these results.

↑ Indicates the demographic category score is significantly higher than the demographic average score.
↓ Indicates the demographic category score is significantly lower than the demographic average score.

IV. Lessons Learned and Key Considerations for Other States

North Carolina's Success Factors

The Department's transformative telehealth policy response to the COVID-19 pandemic offers valuable lessons for other states to consider when seeking to redesign their telehealth policies either within or outside a future public health emergency. North Carolina's successful effort to enable widespread, equitable access to telehealth care during the COVID-19 pandemic and to translate advancements into permanent policy can be attributed to the following factors:

- **Decisive Leadership**. Fast decision-making by Department leadership and the support of the COVID-19 telehealth response team facilitated implementation of necessary foundational policy changes identified prior to the pandemic. The most critical flexibilities enacted by the Department in March 2020 rapidly and greatly expanded the range of services that could be delivered via telehealth and maximized providers' and members' ability to engage in telehealth with minimal impact on quality of care.
- **The Department's robust in-house policy and regulatory staff and expertise.** The Department leveraged internal staff knowledge and external contracts with national Medicaid health policy consultants to inform decision-making. Access to actionable insights enabled the Department to quickly issue policy and adapt to changing national and state circumstances.
- **Unique Partnerships to Support Practices**. The Department leveraged key partnerships with statewide organizations to disseminate information related to telehealth policy changes and support practices' adoption of telehealth. In particular, AHEC and CCNC were trusted resources for practices and provided free technical assistance. The Department also depended on support from the Office of Rural Health to work closely with rural practices to ensure broadband connectivity, adopt new billing guidance, and integrate telehealth into existing workflows.
- **Strong, Transparent Communication Channels and Feedback Loop**. Close collaboration with other state agencies, intra-Department officials, medical professional groups, and other key community partners drove temporary policymaking over the course of the pandemic and informed permanent changes. The Department's feedback loop with the community provided insight into practice and member-level challenges that it could respond to in near real time through a variety of mediums and forums, reaching a vast audience. The Department demonstrated throughout the COVID-19 pandemic that it could be nimble and responsive to concerns, which in turn built trust.
- **Robust Data Collection and Evaluation Efforts**. Prior to the implementation of the first telehealth policy flexibility, an evaluation plan had been developed that (1) guided development of the Department's analytic infrastructure; (2) established a critical system to inform policymaking decisions; and (3) helped the Department present to the community a clear rationale for decision-making.

Continuing Challenges

Although the COVID-19 pandemic prompted significant expansion of telehealth access for Medicaid members and generated newfound interest among patients and providers, utilization has since significantly declined compared with the initial months of the pandemic. As a result, the future of telehealth service delivery among the North Carolina Medicaid population remains uncertain. The Department's Statewide Telehealth Work Group will encounter a variety of new issues that will shape the future scope of telehealth service delivery, including the following:

- **Addressing Continued Telehealth Equity Issues**. A salient challenge beyond the COVID-19 pandemic is ensuring equitable access to telehealth services, particularly for populations that may not have the necessary technology, internet connectivity, or private space to participate in telehealth. Relatedly, there is a need to increase member education efforts to support awareness of and use of technology. The Department provided for a limited time in 2021 enhanced payments to Carolina Access primary care practices serving members from areas with high poverty rates to, among other aims, enable permanent enhancements to telehealth access. Additionally, the Office of Rural Health and the Office of Broadband Connectivity are supporting members by providing subsidies for connected devices and forming partnerships with community organizations, such as libraries, in rural areas to serve as information and support hubs. The Department, in consultation with the Statewide Telehealth Work Group, is focused on strategically investing state and federal dollars to promote equity and close remaining access gaps.
- **Integrating Telehealth into the Medicaid Delivery System**. Beyond the COVID-19 pandemic, telehealth use is evolving as a complement to in-person care, rather than a replacement for it. Many practices continue to struggle with seamlessly integrating telehealth into their workflows and, for those that do, these changes do not always yield additional income or immediately produce time or cost savings. Further, telehealth billing and coding guidelines are still relatively new to practices, and data quality will take time to improve, particularly for small and rural practices. Toolkits and resources developed by the Department and the Office of Rural Health, as well as ongoing technical assistance, will be needed to encourage hybrid care delivery, where clinically appropriate.
- **Maintaining the Highest Quality of Care for Medicaid Members**. The Department will need to maintain a balance between innovation and providing the highest standard of care for Medicaid members. For some services, such as physical and occupational therapy, a broad evidence base for telehealth delivery does not yet exist, and the Department's partnerships with medical professional groups will inform whether a service's standard of care can involve telehealth. Additionally, services provided in the setting of a primary care or specialty care medical home are key to optimizing health. Disjointed or sporadic care that is not based on a longitudinal relationship must be monitored.
- **Augmenting Audio and Video Telehealth with Remote Monitoring**. Though telehealth provided new insight into patients' homes and health care regimens (e.g., medication management), there are still barriers to replicating the physical components of a service via telehealth. There may be opportunities for new remote monitoring devices to support collection of vital signs in

the home, but many of these technologies are still emerging and lack standardized reimbursement parameters.

- **Understanding Workforce Implications**. There are opportunities for telehealth to help alleviate workforce shortages experienced in North Carolina (which are not unique to the state). Telehealth options can provide overworked and understaffed rural clinics avenues to explore alternative staffing models. During the COVID-19 pandemic, some retired providers reentered the workforce because of the flexibility provided by telehealth care delivery. However, as mentioned above, there are outstanding questions regarding whether telehealth-only providers would fit into the Medicaid delivery system, and there are risks that allowing maximum flexibility may exacerbate existing workforce shortages.[9] For example, behavioral health providers, who adopted telehealth at high rates during the COVID-19 pandemic, may prefer to continue providing only virtual care, which may impede in-person access, especially to high-acuity services.
- **Maintaining Capacity to Innovate**. Despite unique models such as the Hybrid Home Health Visit, which have the potential to be transformative, primary care practices lack the human and technological resources to implement new models. Critical developments in value-based payments and prioritizing the importance of meeting members where they live will be required to continually evolve and improve the value of health care.

Conclusion

North Carolina's experience during the COVID-19 pandemic forever changed the way the Department approached policymaking, even beyond telehealth. The Department produced substantial policy changes through the creation and refinement of policymaking criteria.

Most importantly, the Department solidified the strength of the Medicaid program's relationships with providers, members and other community partners in the state. Both providers and members expressed high satisfaction with telehealth, and continue to utilize the modality beyond the peak of the public health crisis. The Department is well positioned to leverage the permanent telehealth policymaking framework and supporting infrastructure to overcome emerging barriers to virtual care delivery in the future.

[9] Currently, the Department requires providers to offer an in-person option for members who request this modality.

V. Appendix

Appendix Exhibit 1. North Carolina Medicaid's Temporary Telehealth Flexibilities During the COVID-19 Pandemic

Specialty Areas and Services	
• Dentistry • Diabetes self-management education • Dietary evaluation and counseling • End-stage renal disease (ESRD) • Enhanced behavioral health programs (e.g., Assertive Community Treatment, Intensive In-Home Services, Mobile Crisis Management) • Family planning • Health and behavior intervention • Infant Toddler Program services • Innovations and Traumatic Brain Injury (TBI) waiver services • Maternal support services • Medical lactation counseling	• Optometry • Outpatient respiratory therapy • Outpatient specialized therapies • Perinatal and postpartum care • Remote physiologic monitoring • Research-based behavioral health treatment for autism spectrum disorder • Self-measured blood pressure monitoring • Smoking and tobacco cessation counseling • Telebehavioral health and telepsychiatry • Telehealth with a supporting home visit (e.g., well-child and maternal health services) • Well-child visits

Eligible Providers and Settings		
• Advanced practice midwives • Audiologists • Certified childbirth educators • Certified diabetes educators (CDEs) • Certified nurse midwives • Certified psychiatric-mental health nurse practitioners • Children's Developmental Services Agencies (CDSAs) • Clinical pharmacist practitioners • Dentists • FQHCs, FQHC look-alikes, and RHCs • Hospital outpatient departments • International board-certified lactation consultants (IBCLCs)	• Licensed clinical addiction specialist associates • Licensed clinical addiction specialists • Licensed clinical mental health counselor associates • Licensed clinical mental health counselors (formerly licensed professional counselors) • Licensed clinical social worker associates • Licensed clinical social workers • Licensed dietitians or nutritionists • Licensed marriage and family therapist associates • Licensed marriage and family therapists	• Licensed psychological associates • Licensed psychologists • Local area agencies (LEAs) • Local health departments (LHDs) • Nurse practitioners • Occupational therapists • Optometrists • Physical therapists • Physician assistants • Physicians • Psychiatric nurse practitioners • Psychiatrists • Psychology and/or counseling professionals • Registered dietitians • Speech language therapists

Appendix Exhibit 2. Permanent Telehealth Policy Recommendations

Telehealth Policy Decision-Making Process Recommendations for Temporary Telehealth Policies	#	%
Recommended keep	10	15%
Recommend keep with changes	24	36%
Consider keep	2	3%
Recommend to not keep	30	46%
Grand Total	**66**	**100.0%**

<table>
<tr><th>To Be Incorporated Into Permanent Post-COVID-19 Telehealth Policy</th><th>To Be Rolled Back Post-COVID-19 Pandemic</th></tr>
<tr><td>

- Enabling telehealth for a variety of services, including (but not limited to):
  - Evaluation and management services
  - Select behavioral health services (e.g., outpatient visits, research-based treatment for autism spectrum disorder)
  - Antepartum/postpartum visits and postpartum depression screenings
  - Family planning
  - Diabetes self-education and management
  - Dietary evaluation
  - Health and behavior intervention
  - Medical lactation counseling
  - Smoking and tobacco cessation counseling
  - Select maternal support services
  - ESRD/dialysis services and training
  - Select CDSA and LEA services
  - Select Innovations and TBI waiver services
  - Select dental services
- Remote patient monitoring services
- Virtual patient communications services (telephone evaluation and management, interprofessional consults)
- Hybrid telehealth visit with supporting home visit (except well-child services)

</td><td>

- Outpatient specialized therapies
- Optometry
- Well-child services
- Enhanced behavioral health program services
- Skilled nursing facility/hospice services
- Pregnancy medical home risk screening

</td></tr>
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Appendix Exhibit 3. Detailed Telehealth Policy Decision-Making Process