Health Care System Transformation and COVID-19: The Case of Medically Complex Older Adults

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Over the last 30 years, state Medicaid programs have steadily shifted the responsibility for managing the care of vulnerable populations from public payers to private plans. States initially limited Medicaid Managed Care (MMC) enrollment to relatively healthy beneficiaries, such as pregnant women and children, and often relied on low-powered financial incentives such as primary care case management to improve care management. However, states have been increasingly shifting older adults and people with disabilities into managed care and developing programs that shift substantial financial risk and corresponding responsibility for care management to private plans. The implications of these changes for enrollees are unclear. While better management of care has enormous potential to improve care delivery and enrollee health for patients with complex health needs, private plans also face incentives to reduce health care use in ways that are not beneficial for enrollees.

Relatively little evidence exists, however, on the implications of these changes for the care received by enrollees, particularly for aged and disabled populations. An emerging literature analyzing the recent experience of these programs has documented substantive effects of MMCs on enrollee health care use and outcomes.[1–3] The results, however, are mixed, with one study from California finding that the shift to MMC increased mortality,[3] while another from Texas suggesting that it improved health among disabled Medicaid beneficiaries.[2] This emerging literature both raises important questions on how vulnerable enrollees fare in the transition to MMC and points to the likelihood that their experience varies across plans and policy environments.

This proposed pilot project is part of a broader research agenda examining how the movement toward value-based care in North Carolina impacts low-income, disabled, middle-aged adults (45-64) covered by Medicaid. North Carolina currently has a small number of innovative care models that were implemented through Medicaid waivers with the goal of delivering more patient-centered, coordinated care for this population. In addition, the State is on the cusp of transitioning its Medicaid population to mandatory managed care in July of 2021. Our project will have two aims based on this policy environment, positioning our team for a larger grant.

Our first aim is to determine the extent to which non-COVID-related care changed during the COVID-19 pandemic for community-based, low-income adults with Medicaid in North Carolina and the implications for health outcomes.

In this aim, we will focus on community-based, disabled adults aged 45-64 enrolled in Medicaid but not Medicare (i.e. – non-duals). The pandemic has created serious challenges for these patients who often have many contacts with health care providers, including those providing care in the home, and are also at high risk for poor outcomes from COVID-19. At the same time, the potential for care disruptions to have a negative impact on health is also quite high. These patients and their providers faced difficult trade-offs in arranging for safe and effective care during the pandemic. Our hypotheses and corresponding outcomes are based on this basic framework. Specifically, as a consequence of the emergence of the pandemic (mid-March 2020), these patients experienced:

a) Reductions in the types of care these patients typically used to manage their chronic conditions, such as in-person office visits and home-based services;

b) Increases in the use of telehealth services which served as a substitute for in-person primary care;
c) Reductions in the use of preventive services;
d) Reductions in nursing home admissions as patients become more reluctant to access institutional care; and
e) Increases in complications arising from inadequate access to primary care as measured by hospitalizations for ambulatory care sensitive conditions and increases in admissions or visits for fractures, infections, and inadequate nutrition.

North Carolina has a Medicaid waiver in place, the Community Alternatives Program for Disabled Adults (CAP/DA), which serves medically fragile disabled adults requiring nursing home level of care. Home and community-based services covered by the program include case management, health services, in-home aides, medical supplies, and caregiving. This creates the opportunity to study a patient group that relies particularly heavily on home-based care. We hypothesize that the CAP/DA group experienced greater reductions in covered home-based services and were at higher risk of complications compared to the broader Medicaid population of 45-64 year-old low-income disabled adults in North Carolina.

Analyses for aim 1 will be based on detailed Medicaid claims data from January 2018 through December 2020. This will allow us to create a pre-pandemic cohort by identifying patients enrolled in the program in 2018 and then tracking their service use in 2019. The COVID-19 cohort will include patients enrolled in 2019 whom we follow through the end of 2020. These data are already available through the Department of Population Health Sciences and the Margolis Center for Health Policy at Duke University due to a relationship with the North Carolina Department of Health and Human Services.

We note that this is a particularly vulnerable population for which we have relatively little evidence on how the pandemic has affected non-COVID-related health care use. While we have robust evidence of dramatic reductions in health care use, particularly during the early stages of the pandemic, this evidence focuses primarily on the commercial population and Medicare beneficiaries and provides relatively little evidence on outcomes.[4–7] Other studies have documented the substantial challenges faced by nursing home residents and their staff, but focused less on community-based, high needs patients.[8]

Our second aim is to evaluate the feasibility of a future study of the effects of the mandatory transition of non-dual Medicaid enrollees to MMC in North Carolina on health care costs, use and outcomes. The goal of this aim is to develop preliminary evidence of the feasibility of a proposed approach to evaluating the mandatory transition to MMC in North Carolina. For the future study, we plan on using a triple-difference approach, comparing the relevant outcomes for Medicaid-only relative to dual-eligible older adults, before and after the adoption of mandatory MMC in North Carolina and between Medicaid eligibles in North Carolina and those in control states, considering both geographic proximity and non-ACA Medicaid expansion. In this pilot proposal, we will evaluate the feasibility of the future study by identifying potential control states and examining pre-trends in study outcomes among dual-eligibles in North Carolina and control states. These analyses will be based primarily on the Medicare claims available at NBER. We note that the availability of Medicaid and Medicare claims for the North Carolina duals at Duke will allow us to determine the extent to which utilization trends measured based on only Medicare-covered services differ from those based on both Medicare and Medicaid- covered services. We will examine differences in trends in relevant study outcomes between 2016 and 2019 between under 65 dual-eligibles in treatment and control states. This preliminary study will allow us to refine our study design by understanding the extent to which the under-65 dual population differs between North Carolina and other states. These analyses will serve as a preliminary study for a future proposal.

We are requesting $50,000 for this project which will support data analyst time dedicated to these analyses.

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