Improving the experience of care, reducing the cost of care, and improving population health are critical goals that North Carolina needs to pursue upon in order to rank higher in national assessments and maintain progress in health care. In 2016, the state ranked 32nd for overall health-down one ranking from 2015.[1] One tool to assist in improving health in North Carolina is an All-Payer Claims Database (APCD). An APCD is an extensive database that collects claims data from public (eg. Medicare, Medicaid, state health plans) and private health insurance payers.[2]

APCDs can be used to inform public health and public policy priorities, evaluate the outcomes of public health programs and policies, determine the actual cost of health care in a state, provide consumer transparency, analyze geographic variation in health, and more.[3-7] Currently, 22 states are developing or have developed an APCD and are using the data to better understand health care utilization, geographic disparities in care, health care cost, and other critical information.[8]

Claims data have many potential uses because they provide broad information about individuals' interactions with the health system. A claim is "a request for payment that you or your health care provider submits to your health insurer when you get items or services you think are covered" [by your health insurance policy].[9] Every time an individual has contact with the health care system, claims data are generated; they can show when an insured individual went to a doctor, had an appointment with a specialist, and filled a prescription. Having access to this comprehensive data increases opportunities to improve quality, control cost, and understand variation in care, all of which are important interests for state government, employers, insurers, providers, and the people of North Carolina.

Task Force Background

With funding from The Duke Endowment, in August 2016 the North Carolina Institute of Medicine (NCIOM) convened the NCIOM All-Payer Claims Database Task Force to study the costs and benefits of creating an APCD in North Carolina. The Task Force met five times between August 2016 and January 2017. The Task Force was chaired by Blanton Godfrey, PhD, Distinguished University Professor, College of Textiles, North Carolina State University, and Joe Cooper, Chief Information Officer, Information Technology Division, North Carolina Department of Health and Human Services. In addition to the co-chairs, the task force had 37 members who represented various payers, health systems, researchers and academics, patients, technology experts, and legislators. A steering committee of six experts guided the Task Force. This report is based on the findings and recommendations of this Task Force over five meetings, each approximately five hours long, from August 2016 to January 2017.

The Task Force had broad, but not unanimous, support for its recommendations from its members. The primary recommendation to establish an APCD was supported by 36 members and opposed by two members with one member abstaining. All members voted. Voting on the remainder of the recommendations generally followed suit.

This report discusses the findings of the NCIOM All-Payer Claims Database Task Force. The charge of the APCD task force was to study the use case of an APCD for North Carolina, examine alternatives to a state-based APCD, and evaluate options for implementing an APCD in North Carolina, including an assessment of legislative interest, governance, and finance. The task force also examined the 22 states with an active APCD or an APCD under development to inform the discussion and identify best practices for implementation. This task force report includes actionable recommendations to move forward towards the creation of an APCD.

Development of a North Carolina All-Payer Claims Database

Claims data can answer many questions about health care for policy makers, employers, health systems, researchers, and consumers, including the types of health care people are using and how much that health care costs in a state. Having this information from all payers across the state would also reveal geographic differences in utilization and cost.

Currently, there is no readily available way to evaluate the total utilization and cost of health care provided in the state. Measuring the cost of health care allows for better management of the costs of health care. Claims data can also show the impact of legislation, allow benchmarking of private and public payers, show geographic disparities across the state for health conditions, determine the cost of those conditions, and more. The task force found that an APCD has compelling opportuities in public health surveillance, planning, evaluation and research but that the design of the APCD should be flexible enough to accommodate for future use cases. **Recommendation 1: The North Carolina General Assembly should establish an All-Payer Claims Database (APCD). The goal of the database should be to improve the health of North Carolinians. Primary use cases include population health surveillance, research, and public policy analysis. However, the legislation, regulation, and design of the database should allow for flexibility for other uses as appropriate.**

The authority for an APCD is generally created through legislation, and the details of implementation are usually determined by a governing board. An APCD requires a governing board to create regulations, to determine data submission and release, and to handle the infrastructure and maintenance of the database. **Recommendation 2: The North Carolina General Assembly should create an APCD governing or advisory board that includes**

health care stakeholders. The types of stakeholders to consider include providers, consumers, employers, national and regional payers, public health professionals, researchers, representatives from NC FAST and the HIE, county social service workers, and others. The governing board should be responsible for making recommendations to the General Assembly regarding an organizational home, regulations surrounding submission and release and infrastructure and maintenance, identification of supplemental funding, and other issues as they arise.

Most states with an APCD legislatively mandate participation. A mandatory APCD allows for a uniform and comprehensive database. In order to create the most useful database, it is imperative that the database is mandated to ensure that all payers with a modest market share in North Carolina participate, submit data on similar timelines, and face penalties for noncompliance.[32] **Recommendation 3: Where legally permissible, the North Carolina General Assembly should require payers who cover 1,000 or more individuals in North Carolina to contribute claims data to the APCD.**

The task force recommends that the primary uses of the North Carolina APCD be for public health surveillance and research. If the APCD primarily serves public health purposes, the task force believes that it should be primarily funded by a recurring appropriation from the North Carolina General Assembly. Payers and health systems do not derive as much value from the database as other users and should not be considered as initial sources for funding. Depending on how the APCD is designed, there is potential for Medicaid funding.[a] The governing board can explore supplemental funding from Medicaid, philanthropy, Health Information Technology for Economic and Clinical Health (HITECH), and data use fees. **Recommendation 4: The North Carolina General Assembly should appropriate recurring funding to support the North Carolina APCD. The North Carolina General Assembly and the North Carolina APCD governing board should explore supplemental funding from Medicaid funds, philanthropy, HITECH, and data use fees.**

North Carolina has engaged in large database projects over the past few years, specifically NC FAST and Medicaid analytics projects. The support for these databases is indicative of the importance of data and electronic analysis in health care today. The APCD would provide additional critical information to measure and manage health care. When possible, the claims data from an APCD should be analyzed in conjunction with data from other sources. **Recommendation 5: The North Carolina APCD should be designed in conjunction with other sources of health and human services data as well as existing data systems.**

Identified data are necessary if the eventual goal of the APCd is to integrate claims and clinical data or link a public health database. Most other state APCDs collect identified data but only release de-identified data. There are various methods for linking data, including direct, unique identifiers (eg, name, address, insurance or social security number) and indirect identifiers (eg, date of birth, gender, zip code). Any information in the APCD should be collected and managed in accordance with federal and state law. **Recommendation 6: The North Carolina APCD should collect and manage identified data in accordance with federal and state law.**

All-Payer Claims Databases strive to be what their name implies: a database that includes all claims from all the payers within a region. In order to be the most comprehensive, the North Carolina database should include medical, pharmacy, dental, substance use, and, potentially, information only claims from public and private payers, including Medicaid, Medicare, Blue Cross Blue Shield of North Carolina, UnitedHealthCare, the State Employee Health Plan, and others. Having a comprehensive, longitudinal database allows for analysis across the health spectrum of the insured—and potentially uninsured—population in North Carolina. **Recommendation 7: The North Carolina APCD should collect all claims data. Proxy data on uninsured patients should be incorporated into the database in the future if feasible.**

An APCD can be used to benchmark with other states. If North Carolina wants to accurately compare health care costs in this state with those in other states, then the North Carolina APCD must use a common data layout. In addition, an APCD requires payers to submit data in a standardized form for the APCD to store. It is burdensome, time consuming, and expensive for payers to change the file type and submit to a database, and if they are participating in multiple state-level APCDs, the cost and burden increases with each new process.[b] **Recommendation 8: If feasible, the North Carolina APCD should adopt a standard data model.**

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a A state can receive a 90/10 match for the development of the Medicaid claims pipeline to the APCD. Once "live", the state can receive 75/25 match for the maintenance of the pipeline. If the APCD is on a subscription model, the state can receive a 50/50 match for the fee that the state Medicaid pays. If the APCD is fulfilling a role in support of a state's Medicaid Management Information System, then the state can receive a 90/10 match for the Medicaid share of the APCD. Kahn, Jessica. Director, Data and Systems Group, Center for Medicaid and CHIP Services, Centers for Medicare & Medicaid Services. Personal (email) communication. Friday, March 17, 2017.

b Inskeep, Bernie. Regulatory Financial Operations, APCD Program Director, UnitedHealthCare. Personal communication. Friday, January 26, 2017.

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