

Metrics to Drive Improvements in Health

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Issue Brief



North Carolina Institute Of Medicine

In 2016, the NCIOM convened a Task Force on Health Care Analytics, at the request of the Division of Health Benefits (DHB) of the North Carolina Department of Health and Human Services, to develop the set of quality metrics that will be used to drive improvement in population health under North Carolina's Medicaid reform plan.

In North Carolina, Medicaid serves low-income and other vulnerable populations, including children from low-income households, older adults, persons with disabilities, pregnant women, and refugees.¹ In state fiscal year (SFY) 2016, North Carolina's Medicaid program served 1.8 million beneficiaries^a (approximately 20% of North Carolina's population) each month, making it the 10th largest Medicaid program in the United States.² North Carolina Medicaid costs approximately \$14 billion annually and is funded primarily by state and federal sources.^b

As a result of North Carolina's Medicaid reform legislation, passed by the North Carolina General Assembly in 2015, significant changes in North Carolina's Medicaid system are anticipated.^{c,d} Additional changes are expected if health care reform bills pass at the federal level.^e

The goals of North Carolina Medicaid reform are to control cost increases in Medicaid over time, share the risk of Medicaid costs with providers and insurers, and maintain or improve the health of Medicaid beneficiaries. Session Law 2015-245 requires the new delivery system and managed care contracts be "built on defined measures and goals for risk-adjusted health outcomes, quality of care, patient satisfaction, access, and cost." Furthermore, the law tasks DHB with developing "effective measures for outcomes and quality" and addressing provider satisfaction.³ The proposed quality metrics should be used to improve health and health care in North Carolina, both directly through Medicaid administration and indirectly through alignment with Medicare, commercial insurers, and other educational and social services.

a This figure does not include NC Health Choice.

b Other funding sources include drug rebates, fraud recoveries, and cost settlements.

c Medicaid Expansion/Healthcare Jobs Initiative, S 290, 2017 Session (NC 2017).

d Carolina Cares, HR 662, 2017 Session (NC 2017).

e Proposed federal legislation may change federal funding for Medicaid to a per capita allotment or to block grant funding. This would limit federal liability for the Medicaid program and place more risk on state budgets. With the federal government contributing less, North Carolina would need to decide whether to contribute more to support Medicaid at current levels or reduce spending. The final status of federal legislation to repeal and/or replace the Affordable Care Act is unclear as of September 2017.

f 2015-245 NC Sess LAws, HB 372 (2015).

Starting in the fall of 2016, the North Carolina Institute of Medicine worked with staff and advisors to the North Carolina Department of Health and Human Services to identify a cross-section of state stakeholders to serve on the Task Force on Health Care Analytics. Members included physicians, nurses, and other health care providers; experts in health care quality measurement and directors of quality improvement initiatives; Medicaid beneficiary and patient/family representatives; private payers; care managers; and others. Diversity of expertise, experience, and geographic region of the state was a key priority for membership selection. The Task Force was supported by a multidisciplinary Steering Committee comprised of senior staff from the North Carolina Department of Health and Human Services' Division of Health Benefits, Population Health Partners, the North Carolina Hospital Association, Community Care of North Carolina, and Evolent Health. The Task Force was chaired by Warren Newton, MD, MPH, Director of the North Carolina Area Health Education Centers; C. Annette DuBard, MD, MPH, Director of Clinical Strategy, Aledade, Inc., former Chief Health Information Officer, Community Care of North Carolina; and James C. Hunter, MD, Senior Vice President and Chief Medical Officer, Carolinas Health Care System.

The Task Force, in most cases, selected measures from existing evidence-based federal and state measurement sets and built on previous work by the North Carolina Division of Medical Assistance (DMA), Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMH/DD/SAS), and others to define and prioritize quality measures for North Carolina Medicaid. The Task Force anticipates measures will evolve based on experience and published evidence, and will need to be reviewed and updated on a regular basis. The methodology for measure selection and selected measures are discussed in subsequent chapters of this report.

The Task Force considered measures across a broad spectrum of health care, care settings, and populations, including but not limited to public health, population health, whole-person health (integration of mental, physical, and oral health), pediatrics, oral health, key high-cost high-risk subpopulations, mothers and infants, those with chronic illnesses and foster children. The Task Force also considered areas of health disparities, including racial and ethnic disparities and disparities between rural and urban areas. The selected measures address our state's most significant health priorities, and are aligned as much as possible with national measures and those of other insurers.

In addition, because of the large proportion of North Carolina's Medicaid population who are children (approximately 50%), the Task Force sought to identify cross-cutting measures that would be applicable to both pediatric and adult Medicaid beneficiaries.

The Task Force used the framework of the Quadruple Aim in prioritizing and organizing measures. The Quadruple Aim is a widely accepted health system performance framework that focuses on improving population health, enhancing patient experience, lowering health care costs, and improving the experience and work life of health care providers. The Quadruple Aim's primary goal

is to optimize health system performance through the simultaneous pursuit of each aim.³ The Task Force addressed all four aims in developing a set of measures for Medicaid.

In addition to identifying a concise set of metrics for use by North Carolina Medicaid to achieve the Quadruple Aim and drive improvements in population health, the Task Force on Health Care Analytics also identified and discussed several additional factors to be considered when operationalizing the measure set. These factors included risk adjustment, attribution, data collection methodology, performance targets, and ongoing review of data and quality improvement.

Final Selected Measures by the Task Force on Health Care Analytics

Improving Population Health

Population Level Measures

- » Healthy Days
- » Live Births Weighing Less than 2,500 grams
- » Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents
- » Body Mass Index Screening and Follow Up (Age 18 and Older)
- » Infant Mortality
- » Chlamydia Screening in Women
- » Social Determinants of Health: Food Insecurity
- » Social Determinants of Health: Housing Instability
- » Social Determinants of Health: Transportation

Preventive Care

- » Childhood Immunization Status
- » Immunizations for Adolescents
- » Well-Child Visits in First 15 Months of Life
- » Well-Child Visits in the Third, Fourth, Fifth, Sixth Years of Life
- » Adolescent Well Care Visits
- » Percentage of Eligibles Who Received Preventive Dental Services
- » Tobacco Use: Screening and Cessation Intervention
- » Screening for Clinical Depression and Follow Up Plan
- » Cervical Cancer Screening
- » Contraceptive Care - Postpartum Women Ages 15-44
- » Behavioral Health Risk Screening for Pregnant Women
- » Prenatal and Postpartum Care

Care of Acute and Chronic Conditions

- » Medication Management for People with Asthma
- » Comprehensive Diabetes Care: HbA1c poor control
- » Controlling High Blood Pressure
- » Hospital-Acquired Conditions
- » Use of Opioids at High Dosage
- » Follow Up After Hospitalization for Mental Illness

Patient Experience of Care

- » Getting Timely Care, Appointments, and Information/Getting Care Quickly
- » How Well Providers Communicate with Patients
- » Access to Specialists

Cost, Utilization, and Low Value Care

- » Total Cost of Care Population-based PMPM Index (risk-adjusted Index)
- » Inpatient Admission Rate (risk-adjusted index)
- » Emergency Department Utilization (risk-adjusted index)
- » Use of Imaging for Low Back Pain
- » NTSV Cesarean Delivery

Workforce Wellbeing

- » Job Satisfaction
- » Measurement of Provider Burnout (TBD by DHB - suggested RAND question or Maslach Inventory)
- » Overall Satisfaction with the Health Plan

REFERENCES

1. Suttan T, Borchik R. Running the numbers: an overview of North Carolina Medicaid and Health Choice. N C Med J. 2017;78(1):58-62.
2. Gaskins RE. Innovating Medicaid: The North Carolina experience. N C Med J. 2017;78(1):20-24.
3. Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. Ann Fam Med. 2014;12(6):573-576.

***A copy of the full report is available online on our website: www.nciom.org/publications**