Achieving Better Quality and Lower Costs in Medicaid through Enhanced Pharmacy Services

Healthcare Landscape in United States: Unsustainable Costs and Poor Quality Drive Transformation

One of the challenges confronting the U.S. health care system is delivering high-value, effective therapies and clinical services that provide the best health outcomes. The 2016 Medicare Board of Trustees report projects the Medicare trust fund will become insolvent by 2028. The U.S. ranks last amongst industrialized countries in cost, quality and health equity. The Affordable Care Act (ACA), enacted in 2010, is implementing numerous ways to extract greater value from the U.S. health care system framed around three core tenets of care: Quality, Access and Cost. The overriding emphasis and focus of payers and providers has been on controlling total health care spending and “Bending the Cost Curve” as ACA is being implemented.

The election this past November has produced a strong drumbeat to ‘repeal and replace’ the ACA. Many questions remain as to what a replacement plan would look like, and how that plan would impact the core tenant of access to healthcare. One area that holds solid, bipartisan support from policymakers and health policy experts is the move away from healthcare payments based on volume of services delivered towards value-based payments which reward providers for achieving high quality outcomes while reducing costs. To achieve this objective, more efforts are being directed towards defining, delivering and measuring “value.”

The importance of medication management within population health is gaining traction based on the need to proactively manage and optimize medication use (especially for patients with chronic conditions) and quality metrics are being tied to reimbursement through public programs and commercial value-based contracts. Quality measures for accountable care organizations, the Merit-based Incentive Payment System, Part C and Part D all include measures related to medication use. The Enhanced Medication Therapy Management model, an ongoing initiative by Center for Medicare and Medicaid Innovation (CMMI), provides incentives for Part D plans to develop creative solutions to optimize medication use and thereby reduce spending in Parts A and B. Regardless of the change in administration, successful value-based initiatives will continue.

Medicaid Reform in North Carolina

Efforts to create more value in North Carolina Medicaid programs are currently underway. In September 2015, then Governor Pat McCrory signed House Bill 372, titled “An Act to Modernize and Stabilize North Carolina’s Medicaid Program through Provider-Led Capitated Health Plans.” This legislation, also known as “2015 Medicaid Modernization,” laid out four key goals for Medicaid and Health Choice reform:

1. Ensure budget predictability through shared risk and accountability
2. Ensure balanced quality, patient satisfaction and financial measures
3. Ensure sufficient and cost-effective administration systems and structures
4. Ensure a sustainable delivery system through the establishment of two types of prepaid health plans (PHPs): provider-led entities (PLEs), and commercial plans (CPs)
This legislation led to the development of a Section 1115 Waiver Application, which was submitted for CMS approval on June 1, 2016. The 1115 Waiver Draft Application lays out four main Demonstration Initiatives, all with the ultimate goal to “improve Medicaid and NC Health Choice and all of North Carolina’s population health by making investments in implementing the provider-driven delivery system and program redesign changes that meet the unique needs of North Carolina.”

The four Demonstration Initiatives are:

1. Creating Systems of Accountability for Outcomes
2. Creating North Carolina Person-Centered Health Communities (PCHCs) and Connecting Children and Families in the Child Welfare System to Better Health
3. Supporting Providers through Engagement and Innovations
4. Care Transformation through Payment Alignment

When combined, these four Demonstration Initiatives constitute North Carolina’s Demonstration Goal: Achieving the Quadruple Aim. This is defined as the Triple Aim (as defined by the Institute for Healthcare Improvement) with the addition of Improved Provider Engagement and Support.⁵

Figure 1: “The Quadruple Aim”

![The Quadruple Aim Diagram]

The Role of Medication Optimization in Enhancing Value

One of the greatest barriers to improving the quality of health care in the United States is the misuse, underuse, and overuse of medications. According to the most recent National Health Expenditure Data, outpatient prescription drug spending accounts for 10% of total health expenditures, with $325 billion of the $3.2 trillion spent on overall U.S. Health Care in 2015.⁶ Most surprising is that annual health care costs attributed to improper and unnecessary use of medicines approach nearly $300 billion, suggesting that for every dollar spent on drugs, nearly an additional dollar is spent addressing a medication misadventure.⁷ There is no question that optimizing medication use is a critical component of care that must be addressed to improve national health care.
Within Medicaid, it has been shown that increased use of prescription drugs significantly decreases medical spending.\(^8\) Complementing this finding, investments made by Oregon Medicaid in primary care as a part of a patient-centered medical home program experiment reduced overall healthcare expenditures by 4.2%.\(^9\) Increases in primary care and pharmaceutical spending resulting from this program were more than offset by decreases in mental health and inpatient spending.

Patients with chronic medical conditions are responsible for a disproportionately large share of Medicaid spending. Reducing hospitalizations is consistently the largest source of potential savings from more optimal medication use.\(^7,8,10,11\) For elderly patients, improved medication adherence has been shown to reduce total healthcare spending and hospitalizations from congestive heart failure, hypertension, diabetes and hyperlipidemia.\(^12\) Similar results have been found for patients taking renin-angiotensin system antagonists and oral antidiabetic drugs.\(^13\)

**Pharmacists as Essential Partners in Optimizing Medication Use**

Medications are an investment, and pharmacists can help that investment perform better. Medication therapy is the cornerstone of prevention and treatment of chronic illness. Complex North Carolina Medicaid patients, on average, see their pharmacist more than they see any other healthcare provider.\(^14\) No healthcare professional is better positioned than pharmacists to address medication-related opportunities to improve value.

A mountain of evidence demonstrates that pharmacists in clinical roles are effective in improving medication use. This has been recognized by the National Governor’s Association,\(^15\) the Public Health Service,\(^16\) and the Center for Medicaid and CHIP Services (CMCS).\(^17\) Since 2000, every newly graduating pharmacist has a Doctorate of Pharmacy (PharmD). Pharmacy school curricula have always prepared pharmacists for clinical roles, and the enhanced clinical emphasis of the PharmD has created a well-trained, capable workforce of community pharmacists. More than two thirds of community pharmacists practice at sites that offer clinical pharmacy services.\(^18\) A community pharmacist working an 8 hour day will spend, on average, an hour providing patient care services not associated with dispensing.\(^18\) It is now commonplace for a pharmacist, alongside dispensing functions, to deliver immunizations, provide basic screenings, and sit down with patients for comprehensive medication reviews.

Comprehensive medication reviews (CMRs) in particular are a critical part of medication therapy management (MTM). A federally funded study of the Part D MTM program found that patients receiving CMRs had improved medication adherence and prescribing quality for chronically ill CHF, COPD and diabetes patients.\(^19\) The provision of MTM services across Part D, Medicaid and commercial plans is growing. In 2016 alone, one MTM vendor processed claims for 2.4 million community pharmacist-provided MTM services.\(^20\)

North Carolina has long been an innovative state for pharmacy practice, and an Asheville demonstration project started in the 1990s provided some of the most cited evidence for the role of the community pharmacist in enhancing patient care and reducing healthcare costs.\(^21,22\) Many well designed small studies have also shown community pharmacists as effective members of the care team.\(^23-30\)

Large studies with matched or randomized controls in chain pharmacy settings also found that patients receiving enhanced pharmacy services had greater medication adherence and lower healthcare costs.\(^31-33\)
Community pharmacist engagement with accountable care organizations (ACOs) can support decreased medication spending and increased medication use quality.\textsuperscript{34,35} A recent report commissioned by the Robert Wood Johnson Foundation recognizes community pharmacists as potentially valuable partners in achieving ACO aims and encourages innovative ACO models to engage with pharmacy networks.

The emergence of high-performing pharmacy networks is a further indication of the evolving clinical role of community pharmacists.\textsuperscript{36-39} These networks gather together pharmacies which have the ability to provide enhanced services to patients. Examples of enhanced services include MTM, medication synchronization with clinical review, and home delivery with review of patient status.\textsuperscript{36} Insurers are contracting with high-performing networks and additional research is needed to evaluate outcomes from these partnerships.

*Enhancing the Role of Pharmacy in Medicaid Improves Patient Care and Lowers Healthcare Costs*

Medicaid programs have been supporting innovative roles for community pharmacists for over 15 years. The following state examples provide a framework for considering possible future roles for pharmacists in supporting North Carolina Medicaid reform’s quadruple aim.

**North Carolina:**

North Carolina is home to one of the most prominent examples of innovative community pharmacists making a difference for patients with Medicaid. With grant funding from the Center for Medicare and Medicaid Innovation, Community Care of North Carolina has created a network of 250 community pharmacies called a Community Pharmacy Enhanced Services Network (a CPESN\textsuperscript{SM} network).\textsuperscript{40}

Through a pharmacy information exchange platform, pharmacists have greater access to patients’ prescription history and other data accessible to medical home care managers. North Carolina Medicaid and Medicare enrollees with at least one chronic condition who fill 80% of chronic medications at a CPESN pharmacy can receive enhanced medication management services.

The services provided by pharmacies are expected to reduce hospital admissions, emergency department visits, and total cost of care through proactive medication management and assistance. Evaluation of program effectiveness is underway and initial results have been positive.

**California:**

Inland Empire Health Plan, an innovative Medicaid managed care plan, has implemented one of the most progressive value-based pharmacy payment models.\textsuperscript{39} Their pay-for-performance program evaluates pharmacies on a set of seven quality metrics and provides bonuses to high quality pharmacies. In July, 2016 Inland Empire implemented a high-performing pharmacy network, designed to provide targeted care to patients with chronic illness.\textsuperscript{41} Qualifying high quality pharmacies are paid for providing MTM services to eligible patients, and receive bonuses for patients with diabetes, hypertension, high cholesterol and asthma/COPD. Results from both phases of the program have yet to be released.
Minnesota:

Minnesota requires coverage for MTM services in its contracts with Medicaid prepaid health plans. A 2005 law requires MTM coverage for Medicaid enrollees with high medication use and multiple chronic illnesses. An early analysis of the program was focused around four key parameters:

Clinical Care Analysis: Pharmacists identified and resolved 789 drug therapy problems for 259 recipients (3.1 drug therapy problems per recipient). Several clinical goals of therapy were also met, and diabetes quality benchmarks in the MTM programs were higher than state average.

Economic Analysis: A six month pre- and post- analysis of MTM beneficiaries showed a 24% increase in prescription drug spend, which would be expected when resolving drug therapy problems related to inadequate therapy and the need for preventative therapy.

Implementation and Improvement Analysis: Continuous Quality Improvement frameworks were utilized to conduct implementation and improvement analyses. Several key findings were generated regarding the first year of the program through these frameworks.

- Analysis of documentation standards showed greater than 90% compliance with 11/14 essential documentation elements.
- Cooperation in implementation among multiple stakeholders (state professional association, academia, industry and the State of Minnesota)
- The ten most productive MTM pharmacists in the first year of the program were part of an integrated delivery system, with pre-established collaborative practice arrangements.

Ohio:

In 2012, a Medicaid managed care plan opted to establish an MTM program for nearly 1 million Ohio Medicaid beneficiaries. By the end of 2013, pharmacists at 1,500 pharmacies had provided over 100,000 MTM interventions, 40% of which were associated with medication adherence. In a program evaluation, the managed care plan reported a $4.4: $1 return on investment for total health care expenditures.

Iowa:

The Iowa Medicaid Pharmaceutical Care Management (PCM) program has existed since 2000 and provides support for pharmacist-physician collaboration in providing MTM to Medicaid patients with multiple medications and chronic illness. A study of program results from the first year and a half found that pharmacists identified medication related problems for nearly all patients who received the service, and made an average of 3.8 recommendations for medication changes per patient. According to the program’s design, these recommendations are sent to the patient’s primary care physician for review and, if necessary, new prescriptions. The study found that physicians accepted half of pharmacists’ recommendations and that PCM significantly improved measures of medication safety and appropriateness with no offsetting increases in physician visits or healthcare costs. Based
on the results of the initial studies, the Iowa legislature has opted to continue the PCM program as a part of Medicaid, even after Iowa transitioned to managed care in 2016.

Policy Recommendations: Achieving Better Patient Quality and Lower Costs in Medicaid through Enhanced Pharmacy Services

We envision NC Department of Health and Human Services (NC DHHS) will provide oversight and direction to the Prepaid Health Plans (PHPs) to ensure that essential health benefits and quality metrics are met. As such, our recommendations provide measurable activities and metrics that ensure that quality based activities, like medication optimization, are a core component of the PHP offerings.

Specifically, these four recommendations are based on existing efforts underway in North Carolina that are aligned with the Medicaid reform priorities, and that seek to take a step-wise, collaborative approach to demonstrating positive outcomes, scalability and sustainability.

1. **Utilizing the payment and attribution models developed from the community pharmacy enhanced services network project, allow the PHPs to develop a pay for performance model for community pharmacies. The model should be built on performance metrics that align with the global outcomes (total cost of care), as well as select quality metrics.**

2. **Identify one to three PHPs to test the community pharmacy enhanced services care management model. Evaluate the impact compared to other PHPs relative to economic and clinical outcomes, as well as provider and patient satisfaction. An emphasis should be placed on testing this model in rural areas.**

3. **Consider similar regulatory allowances for the PHPs to expand pay for performance models of clinical pharmacy services to include ambulatory care, transitions of care, and specific therapeutic areas like immunizations and chronic pain management.**

4. **Encourage the PHPs to test models that include high-performing pharmacy networks into their capitated, value based contracts in order to evolve care delivery toward better coordination and a focus on the total cost of care.**
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