The North Carolina State Health Plan provides health care coverage to more than 700,000 members, including teachers, state employees, retirees, current and former lawmakers, state university and community college personnel, and their dependents. The State Health Plan is a division of the North Carolina Department of State Treasurer, self-insured, and exempt from the Employee Retirement Income Security Act as a government-sponsored plan. With health care costs rising at rates greater than funding, the Plan must take measures to stem cost growth while ensuring access to quality health care. The Plan anticipates focusing on strategic initiatives that drive results and cost savings while improving member health to protect the Plan’s financial future.

The North Carolina State Health Plan (Plan) was established in 1974 and is tasked in Article 3B of Chapter 135 of the North Carolina General Statutes with making health benefits available exclusively for eligible active employees, retired employees, and certain eligible dependents. Article 3B also prescribes general conditions and terms within which the Plan will operate [1]. Initially, the Plan was governed by the North Carolina General Assembly (NCGA). In 2011, governance transitioned to the North Carolina Department of State Treasurer who, along with the Executive Administrator and Board of Trustees, carries out duties and responsibilities as fiduciaries of the Plan [1].

In 2018, the Plan will administer 2 self-funded group health plans for active employees and non-Medicare primary members: the 80/20 Plan and 70/30 Plan. Both plans utilize a preferred provider organization established by a contracted third party administrator (TPA). The 2 plans also provide pharmacy benefits under a separate contracted pharmacy benefits manager (PBM).

Medicare primary members are eligible for 1 of 2 fully-insured Medicare Advantage plans, or they can choose to enroll in the self-funded 70/30 Plan, which coordinates with Medicare. In addition, the Plan offers a high-deductible health plan for non-permanent, full-time employees to comply with the federal Patient Protection and Affordable Care Act.

Plan Membership

As of June 30, 2017, Plan membership includes more than 700,000 members and includes teachers, state employees, retirees, current and former lawmakers, state university and community college personnel, and their dependents (see Tables 1 and 2).

| TABLE 1.  
North Carolina State Health Plan Membership by Employee Type |
|-----------------|-----------------|
| Category (by employee type) | # Members |
| Active | 493k |
| Medicare retirees | 161k |
| Non-Medicare retirees | 59k |
| Other | 4k |
| TOTAL | 717k |

Note. Totals include dependents. Source. Plan membership reporting as of June 30, 2017.

| TABLE 2.  
North Carolina State Health Plan Membership by Group |
|-----------------|-----------------|
| Category (by group) | # Members |
| Public schools | 259k |
| Retirees | 220k |
| State agencies | 99k |
| Universities | 88k |
| Community colleges | 25k |
| Municipalities | 13k |
| Charter schools | 7k |
| Other | 6k |
| TOTAL | 717k |

Note. Totals include dependents. Source. Plan membership reporting as of June 30, 2017.
Funding

The Plan is supported with premium payments, 83% of which come from the state as employer premium contributions (see Figure 1). Every 2 years, the NCGA sets the employer contribution in the state budget and provides the additional funding needed to support increases directly to the state agencies. Additional funding comes from Plan subscribers and retirees, who pay premiums to supplement the NCGA funding to cover overall plan costs.

As medical and prescription drug costs continue to rise nationwide, the Plan continues to seek the best way to balance members’ needs against the Plan’s commitment to ensuring Plan sustainability. Nationally, medical costs, while rising at a flatter rate, are still expected to increase in excess of 6% per year for the next 4 years. Prescription drug costs (including specialty and generic drugs) are rising between 7% and 9% annually across all settings (ie, clinics and hospitals) [2].

During the 2017 regular legislative session, the Plan requested an increase in the employer contribution from the NCGA of 7% to cover projected increases in claims costs for 2018. Both the NCGA and the Governor ultimately funded the Plan with an annual increase of 4%. This 3% gap puts significant pressure on the Plan to identify savings in order to avoid further increases to employee and retiree premiums and to avoid further changes to members’ out-of-pocket costs for the coming year(s). Because the Plan has a fiduciary responsibility to ensure a sustainable health plan, it is focused on building value and reducing complexity while ensuring quality health care.

Cost Drivers

Plan costs can be broken down into Medical Claims Paid, Pharmacy Claims Paid, Medicare Advantage Premiums, and Administrative Costs (see Figures 2 and 3). The Plan spent a total of $3.3 billion in State Fiscal Year (SFY) 2016–2017 and will spend a similar amount in SFY 2017–2018. While there are a number of variables around Plan membership that drive current costs, and will drive future costs, the biggest cost drivers are inflation (unit costs), high cost claimants (including diabetes, cancers, cardiology, orthopedics, and rheumatology), and utilization of specialty drugs.

As with national trends in medical and prescription drug costs, Plan expenditures follow similar trend lines. Direct costs such as professional fees, drug costs, and facility costs are increasing at varying rates. This creates a complex equation presenting challenges for Plan administrators.

From FY 2011–2012 and in FY 2016–2017, Plan medical costs on a per member, per month (PMPM) basis rose at a rate of 3.5% each year, which does not include pharmacy costs. The low trend was helped by the introduction of Medicare Advantage (MA) plans in 2014. That change altered the cost structure of the Plan by eliminating claims costs for more than 100,000 Medicare retirees who moved into fully-insured MA options, thus replacing those costs with premiums paid to MA vendors. Comparisons of current claims costs to costs prior to 2014, therefore, are difficult to assess (Plan, unpublished data, 2011–2012, 2012–2013, 2013–2014, and 2014–2015).

From 2014 to 2016, the Plan’s PMPM claims costs increased by an average of 5.2% per year, including a 3.7% average annual increase in PMPM medical costs and a 9.8% average annual increase in PMPM pharmacy costs. PMPM pharmacy costs have decreased by more than 10% through the first 9 months in 2017 due to a new PBM contract and the adoption of a closed, custom formulary that increases overall pharmacy savings. With the reduction in pharmacy costs, overall claims costs are flat from 2016 through the first 9 months of 2017 (Plan, unpublished data, 2011–2012,
As aforementioned, the MA plans have reduced Plan cost. Pricing for the base MA plan has increased an average of just 1.7% annually from 2014 and projected to 2018. This will have a positive long-term financial impact on the Plan, given that Medicare-eligible retirees are the fastest-growing segment of the Plan’s membership [3].

Strategies to Mitigate Costs

Through the years, the Plan has focused on various initiatives designed to address the key components of the Triple Aim, which include improving the quality of care, improving health, and reducing overall costs. The primary focus has been on implementing initiatives that drive results and cost savings to provide further assurance of the Plan’s financial future. The following are some examples of approaches designed to protect the Plan's financial stability along with improving member health.

Plan Strategies to Protect Financial Stability

Enhancing Data Analytics

The Plan is currently building and strengthening its internal data analytics capabilities to independently research and aggregate data from various vendor sources including the TPA, PBM, and Medicare Advantage Provider, as well as many others. While each independent vendor partner has its own data, the Plan anticipates being able to aggregate data and use analytics to identify opportunities for targeted care management, thus impacting overall cost.

Significant cost reduction opportunities exist in the phar-
According to PricewaterhouseCoopers’ Medical Cost Trend Report, “Behind the Numbers,” evaluating pharmacy claims data to identify what conditions and drugs drive spending can provide a variety of opportunities for cost containment. Additionally, consideration for outcomes-based payment models—working closely with pharmacists, pharmaceutical companies, and providers to ensure high-risk patients are adhering to treatments—can also produce favorable results [4].

**Targeted Case Management**

The Plan anticipates using analytics as aforementioned to evaluate the high drivers of health care costs down to the county, hospital, Primary Care Provider (PCP), or patient level. For example, as of June 30, 2017, 80% of the medical claims costs for non-Medicare Advantage members were incurred by 17% of Plan members (Plan, unpublished data, 2017). The top high-cost conditions are diabetes, cancers, cardiology, orthopedics, and rheumatology. By using analytics to evaluate these conditions, the Plan’s strategy for potential cost savings is to identify new opportunities for better management of high-cost claimants.

**Coordinated Care Management**

Coordinating care across all elements of the broader health care system, including specialty care, hospitals, home health care, and community services and supports, is an important component of the Triple Aim. Such coordination is particularly critical during transitions between sites of care, such as when patients are being discharged from the hospital and they return home. The Plan will institute strategies to avoid patients having multiple care managers across
a single episode of treatment (e.g., Primary Care Medical Home, Hospital, Physical Therapy) where fewer could more effectively and efficiently provide the service. This is not only redundant and costly, but also frustrating and burdensome to the member [5].

Other strategies the Plan is utilizing to further impact cost savings include educating members on the role they play in managing their own care and the cost of medical services. This correlates with an ongoing need to provide the proper technology and tools to members to help them select the most appropriate and cost-effective care.

**Strategies for Improving Member Health**

**Access to Care**

The Plan serves members across North Carolina as well as in all 50 states. While there are concentrated pockets of Plan members in urban areas, there are also members in all 100 counties in North Carolina. Therefore, it is important to provide the opportunity for high-quality care with reasonable access across the state.

For example, provider networks can offer shorter waiting times for urgent needs, enhanced in-person hours, around-the-clock telephone or electronic access to a member of the care team, and allow the use of alternative methods of communication such as email and telephone care [5]. Provider networks can improve access while driving costs down and, at the same time, enhancing the quality of care.

**Prescription Drug Adherence**

According to the FDA, adherence by patients to prescription drug regimens could be significantly improved. Statistics indicate: 20%–30% of new prescriptions are never filled at the pharmacy; 50% of the time, medication is not taken as prescribed; for patients with chronic diseases, after 6 months, the majority take less medication than prescribed or stop the medication altogether; and only 51% of patients taking medications for high blood pressure continue taking their medication during their long-term treatment [6].

In addition, the Centers for Disease Control and Prevention (CDC) estimates that nonadherence to medication causes 30%–50% of chronic disease treatment failures and 125,000 deaths per year in this country. Twenty-five percent to 50% of patients being treated with statins (cholesterol-lowering medications) who stop their therapy within one year have up to a 25% increased risk for dying. The Plan has strategies in place to educate members on the importance and benefits of medication adherence as it can improve health and ultimately save lives [6].

**Primary Care Provider Engagement**

In 2014, the Plan encouraged identification of a PCP for members who selected certain plan options. A relationship with a PCP establishes a trusted source for routine and other health care needs over time and can further improve a patient’s overall health.

In 2017, more than 190,000 employees and retirees on the 80/20 Plan (greater than 99% of the subscribers) selected a PCP. Additionally, it appears that the PCP-patient relationship has solidified among a large segment of our members, with more than 60% of those who selected a PCP visiting their provider in each of the prior 3 years.

**Conclusion**

The benefits provided by the Plan play a vital role in the hiring, retention, and livelihood of state employees. This benefit equips state employees and their families with cov-
average and programming to maintain a healthy lifestyle.

With health care costs rising at rates greater than funding levels, the Plan must take measures now to stem the growth in costs while ensuring quality services and access to health care for its members. The increased use of data analytics, targeted case management, and efficient access to care—along with the implementation of initiatives that drive results and generate cost savings—will further provide assurance of the Plan’s long-term sustainability.

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Acknowledgments
Potential conflicts of interest. D.J. and B.H. have no conflicts of interest.

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