HUMAN RESOURCES
BENEFITS OFFICE
UNIVERSITY OF MICHIGAN

# 2018 Prescription Drug Plan Annual Report
# May 22, 2019

## Executive Summary

Calendar year 2018 was the sixteenth year of operation for the university's self-administered prescription drug plan. In 2018, the pharmacy plan cost represented 21.2% of the university's $610M total spend on health benefit programs. With the inclusion of the medical drug spend, drug cost represents 29.3% of the university's total spend. Growth in membership, generic drug cost, specialty drugs and inflation contributed to a gross 16.0% increase in total drug cost in 2018, a substantial rise from the 5.2% increase seen in 2017. On a per-member basis, total drug cost increased 12.1% in 2018. Specialty drug spending continues to grow despite representing only 1.6% of all claims. Gross total cost for specialty drugs rose 23.5% (or 19.4% on a per-member basis) in 2018, representing 41.1% of total pharmacy costs, an increase of 2.5% over 2017.

While the pharmacy benefit team continues to leverage clinical expertise and innovative strategies to mitigate cost increases, improve outcomes and support university objectives, the rising costs of pharmaceutical products may warrant more aggressive approaches related to specialty drugs and member cost share going forward.

## Report Contents

## 2018 Cost and Utilization Metrics

Key performance metrics based on an average 112,574 eligible members per month, a 3.4% increase in membership over 2017, are reported in Tables 1 and 2. Eligible membership has grown on average 2.8% per year for the last five years.

**Table 1:** Cost and Utilization Metrics, 2018

| | All Claims | | Non-Specialty | | Specialty | |
|---|---|---|---|---|---|---|
| | Cost and Utilization | Change from 2017 | Cost and Utilization | Change from 2017 | Cost and Utilization | Change from 2017 |
| Claim Volume | 1,007,705 | 1.4% | 991,381 | 1.1% | 16,324 | 18.4% |
| Utilizing Members | 85,612 | 2.1% | 85,500 | 2.1% | 2,291 | 17.5% |
| Total Drug Cost | $157,210,302 | 16.0% | $92,581,696 | 11.2% | $64,628,607 | 23.5% |
| Plan Cost | $144,222,504 | 16.6% | $80,141,556 | 11.8% | $64,080,949 | 23.3% |
| Member Cost | $12,987,798 | 9.0% | $12,440,140 | 7.4% | $547,659 | 67.4% |
| Percent Member Total Cost Share | 8.3% | -0.5% | 13.4% | -0.5% | 0.8% | 0.2% |
| Total Drug Cost PMPM* | $116.38 | 12.1% | $68.53 | 7.5% | $47.84 | 19.4% |
| Plan Cost PMPM | $106.76 | 12.8% | $59.32 | 8.1% | $47.44 | 19.2% |
| Member Cost PMPM | $9.61 | 5.4% | $9.20 | 3.7% | $0.41 | 28.1% |
| Average Number of Claims Per Utilizing Member Per Year | 9.0 | -2.0% | 11.6 | -0.9% | 7.1 | 0.1% |
| Average Day Supply Per Claim | 48 | 3.5% | 48 | 3.2% | 32 | 6.7% |

**PMPM = per (eligible) member per month*

**Table 2:** Tier Utilization, 2018

| Drug Tier | Paid Claims | % Total Claims | | | % Plan Cost | | |
|---|---|---|---|---|---|---|---|
| | 2018 | 2018 | 2017 | Change | 2018 | 2017 | Change |
| Tier 0 – $0 Copay | 112,342 | 11.2% | 7.2% | 4.0% | 11.9% ($17.0M) | 11.6% | 0.3% |
| Tier 1 – Generics | 833,538 | 84.0% | 84.1% | -0.1% | 17.5% ($24.9M) | 17.0% | 0.5% |
| Tier 2 – Preferred Brands | 52,990 | 5.3% | 5.8% | -0.5% | 56.3% ($80.1M) | 57.2% | -0.8% |
| Tier 3 – Non-Preferred Brands | 25,012 | 3.5% | 3.8% | -0.3% | 14.2% ($20.2M) | 14.2% | -0.1% |

*Note: Tier 0 represents generic and brand claims where the out of pocket cost to the member is $0. Prior to 2013, this only applied to insulin and syringes for diabetes. In 2014, $0 copay was also applied to preventive care drugs under the Affordable Care Act (ACA) including contraceptive products for females. Cholesterol lowering statins were added to ACA $0 copay preventive care drugs in November 2017. Excludes 'paper' claims.*

## Plan Operations and Administration

### *Vendors and Requests for Proposals*

2018 was busy with contract renewals. Renewals were completed with MedImpact (PBM) for a 2-year term, NoviXus (mail order) for a 3-year term, Michigan Medicine Specialty Pharmacy for a 2.25-year term, and Pharmaceuticals Strategies Group for a 2-year term.

### *Benefits Administration Office Staffing*

The prescription drug plan backfilled our Clinical Pharmacist Specialist position in 2018. A candidate search was completed in fall of 2018 and Michael Phalen, PharmD, CSP, was hired effective January 7, 2019. Dr. Phalen brings to the university years of experience managing specialty pharmacy utilization and spend for payer groups, as well as conducting utilization reviews and outcomes research with a large specialty pharmacy.

In support of the University of Michigan's academic mission and key partnerships with the College of Pharmacy and Michigan Medicine, the Benefits Administration Office is in the third year of hosting a Post-Graduate Year 1 (PGY1) Pharmacy Residency program. The initial on-site accreditation survey was completed in the fall of 2017, and the plan was awarded a full, 6-year accreditation. Our residency program offers real-world learning in all aspects of pharmacy benefit management, including member support and communication, formulary management, and network and vendor management. This program underscores our commitment to education, training leaders and being a national leader in pharmacy benefits.

### *Regulatory Compliance*

Federal and state regulations require the plan to comply with rules and guidance for employers. The plan paid $1.2M for the State of Michigan Health Insurance Claims Assessment (HICA) tax in 2018, an increase of 12.1% from 2017. The HICA tax rate was repealed for self-insured plans effective October 1, 2018.

Since 2015, Truven Health Analytics has administered the Medicare Part D Retiree Drug Subsidy (RDS) for the drug plan. The Centers for Medicare and Medicaid Services (CMS) continues to pay this subsidy based on eligible claims. The plan received $4.7M from CMS in 2018.

In June of 2018, the plan completed an analysis to evaluate changing the current Medicare RDS to a Medicare Part-D Plan Employer Group Waiver Plan (EGWP). The analysis findings were inconclusive for savings warranting change and resulted in retaining the RDS. The university will complete another analysis in 2-4 years.

In spring of 2018, the plan implemented a mandated coordination of benefits (COB) for those Medicare-eligible retirees who are also enrolled in a Medicare Part D plan. The university continues to claim the retiree drug subsidy for our Medicare-eligible retirees. Medicare Part D is primary to any commercial plan for Medicare-eligible retirees. This COB requirement saved an estimated $93K in 2018.

Requirements under the Affordable Care Act (ACA) continued to impact the plan in 2018. The ACA requires coverage of preventive care medications at no out-of-pocket cost to patients, including female contraception; smoking cessation products; breast cancer prevention; use of statins for primary prevention of cardiovascular disease; and aspirin, folic acid, iron and other supplements for high-risk patients. Although not required by the ACA, the plan has historically also provided insulin at no out-of-pocket cost to members. Plan expenditures for the $0 tier copay products in 2018 were $17.0M, including $2.9M (61.1% increase) in member copay relief. The cholesterol lowering statin agents, which were added in the fall of 2017, received the majority of copayment relief in 2018 at $1.2M, contraceptives were second at $882K (2.6% increase), followed by insulin and diabetic supplies at $703K (10.2% increase).

Prior to 2014, the plan's infertility benefits were limited to $5,000 per family per lifetime. Because dollar limits are not permitted under the ACA, the plan now limits higher-cost fertility drugs to a maximum of five claims per family per lifetime, with no limits for lower-cost fertility drugs. In January 2015, the university also implemented

a pilot to cover in vitro fertilization (IVF) procedures. Total drug cost for infertility medications increased to $1.4M in 2018, from $1.2M in 2017. Infertility cost is being driven by increases in membership and a 7.8% increase in the number of utilizers per 1000 eligible females of reproductive age. A retrospective review shows that the average plan cost for a member using infertility medications with a five-claim limit is approximately $8,762 per lifetime, a slight decline since last year's measurement.

The plan continues to actively monitor the legislative and regulatory landscape in order to be as prepared as possible to respond to any changes that may occur.

## Cost Management

### *Plan Cost*

A total of 1,007,705 prescriptions were dispensed at a total plan cost of $144M in 2018, a 16.6% increase PMPM from 2017. Plan costs by employee type are reported in Table 3. Long-term disability (LTD) participants represent only 0.9% of the plan member population.

**Table 3:** Plan Cost, 2018

| | Plan Paid | Plan PMPM | PMPM Change from 2017 | % of Plan Paid | Change in % Plan Paid from 2017 |
|---|---|---|---|---|---|
| Overall | $144M | $106.76 | 12.8% | | |
| Active Employees | $97.7M | $83.58 | 12.5% | 67.8% | -0.3% |
| Retirees | $41.3M | $242.42 | 13.3% | 28.6% | 0.9% |
| LTD | $5.2M | $455.09 | 13.9% | 3.6% | -0.6% |

The average plan cost for a 30-day prescription increased 11.6% from $80.82 in 2017 to $90.19 in 2018. The aggregate discount from Average Wholesale Price (AWP) for combined retail and 90-day retail prescriptions was -55.0%; a decline from -56.9% in 2017, contributing 3.9% to the total drug cost PMPM trend (32.4% of the trend). During calendar year 2017 the aggregate rates over-performed relative to the contract; in 2018 the over-performance gap narrowed significantly, resulting in increased cost to the plan.

Price inflation is occurring with brands, as shown in the average ingredient cost, despite aggressive negotiated network discounts. The average ingredient cost of a single-source brand prescription increased by 12.4% in 2018 to an average 30-day ingredient cost of $654.42 per prescription. This increase was mainly driven by high-cost specialty drugs. The average ingredient cost of a multiple-source brand prescription increased by 7.8% to an average 30-day ingredient cost of $368.58 per prescription. The average ingredient cost for a generic prescription increased by 19.0% to an average 30-day cost of $24.01 per prescription.

### *Trend*

Total drug cost (combined university plan and member costs) PMPM increased 12.1%, from $103.80 in 2017 to $116.38 in 2018. An overview of the factors that impacted plan drug costs in 2018 are listed in Table 4 in order of importance. Further details are provided elsewhere in this report.

**Table 4:** Top Factors Affecting Drug Costs, 2018

| Positive (Mitigated Trend) | Negative (Increased Trend) |
|---|---|
| 1. Generic dispensing rate improvement of 0.3%<br>2. Formulary management of high-cost generics<br>3. Medicare Retiree Drug Subsidy<br>4. Generic and brand drugs – high generic dispensing rate; less preferred and non-preferred brand use<br>5. Increased use of Michigan Medicine Specialty Pharmacy discounts on specialty drugs<br>6. Prior authorizations, step therapy and quantity limits, assuring appropriate use | 1. Higher than typical price inflation<br>2. Addition of more high-cost specialty drugs, more indications, and increased utilization for specialty drugs<br>3. 3.4% increase in eligible membership and 2.1% increase in utilizing members<br>4. Fewer patent expirations impacting generic dispensing rate<br>5. Declining member cost share<br>6. Increased cost shift of member copays for $0 preventative drugs with the addition of statin medications |

The average percent of claims dispensed as generic increased from 87% to 87.3% in 2018. The increase in generic dispensing rate is estimated to account for approximately $3.2M in savings. In 2019, the projected new-to-market generic entries will represent about 8.0% of total drug cost and 6.0% of all claims.

***Traditional Pharmacy***

The top three traditional therapeutic classes for cost during 2018 remained unchanged from 2017 and included drugs to treat diabetes ($19M), asthma/COPD ($9.7M) and anticoagulation ($5.3M).

The plan spend on diabetes drug treatments increased $3M (0.3%) from 2017, representing 13.2% of plan cost in 2018.

**Table 5:** Top Diabetic Drug Classes Driving Cost, 2018

| Diabetic Drug Class | 2018 Cost | Unit Cost Inflation | Utilizers/1000 Eligible | Utilizers |
|---|---|---|---|---|
| Insulins | +$1,406K | +5.3% ($614K) | -0.4% | +2.7% |
| GLP-1 (Diabetes) | +$1,026K | +11.0% ($313K) | +30.1% | +33.3% |
| SGLT2 | +$610K | +8.1% ($112K) | +46.3% | +51.3% |
| DPP4 | +305K | +9.9% ($176K) | +11.8% | +15.6% |

Formulary removal of high-cost generic metformin ER in 2017 contributed to $183K in savings for metformin products in 2018, despite a 7.4% increase in utilizers of metformin products.

Insulin cost accounted for 62.9% of the $19M in the diabetic drug class. Late in 2016, the first insulin glargine (Lantus) biosimilar, Basaglar, entered the market. Effective January 1, 2019, brand insulin products with follow-on or authorized generic insulins will be subject to a Tier 3 copayment. The follow-on or authorized generic insulins will continue to be zero cost share for members. The GLP-1 and SGLT2 diabetic drugs classes continue to have significant increases in utilization and price inflation.

In 2018, the plan continued the active switch program for brand dipeptidyl peptidase-4 (DPP4) agents to generic alogliptin. The DPP4 active switch program mitigated the cost increase by an estimated $0.17 PMPM.

The plan spend for asthma/COPD products increased by $1M or 6.7% in 2018, to $9.7M in total cost. We are hopeful that the generic market entry of fluticasone/salmeterol inhalers, generics to AirDuo and Advair Diskus, will mitigate plan and member cost in this drug class for 2019. The plan spent $2.9M on Advair Diskus, which made up 30.0% of the total drug costs for the asthma/COPD drug class

Plan costs for anticoagulants increased $1.2M in 2018, primarily due a 26.4% increase in utilizers and a 5.7% unit cost inflation of the direct oral acting anticoagulants.

***New Drug Impact***

New branded products approved in 2018 contributed $1.0M in plan spend. New to market generic entries in 2018 yielded an estimated $691K in savings for the year.

**Table 6:** New branded products with plan utilization, 2018

| Generic Name | Brand Name | Use | 2018 Plan Spend |
|---|---|---|---|
| Tezacaftor/Ivacaftor | Symdeko | Cystic Fibrosis | $635K |
| Bictegrav/Emtricit/Tenofov Ala | Biktarvy | HIV | $146K |
| Erenumab-Aooe | Aimovig | Migraine | $124K |
| Fostamatinib Disodium | Tavalisse | Thrombocytopenia | $57K |
| Binimetinib | Mektovi | Melanoma | $11K |
| Encorafenib | Braftovi | Melanoma | $11K |
| Apalutamide | Erleada | Prostate Cancer | $9K |
| Galcanezumab-Gnlm | Emgality | Migraine | $9K |
| Fremanezumab-Vfrm | Ajovy | Migraine | $1K |
| Elagolix Sodium | Orilissa | Endometriosis | $1K |

**Table 7:** Top new generic products with plan utilization, 2018

| Generic Name | Brand Name | Use | Estimated 2018 Savings |
|---|---|---|---|
| Estradiol | Estrace VC/Minivelle | Estrogen Replacement | $191K |
| Tadalafil | Cialis/Adcirca | BPH/ED/PAH | $105K |
| Fampridine | Amprya | Multiple Sclerosis | $76K |
| Memantine XR | Namenda XR | Alzheimer's Dementia | $72K |
| Miglustat | Zavesca | Gaucher's Disease | $58K |

Late entry 2018 new generics, which are expected to contribute $1.4M in 2019 estimated savings, include tadalafil (Cialis, erectile dysfunction & BPH), clobazam (Onfi, seizures), dalfampridine (Ampyra, multiple sclerosis), testosterone (Androgel, testosterone replacement), and buprenorphine/naloxone (Suboxone, opioid dependence).

## Member Cost Share and Utilization

***Member Cost Share***

Due to a number of high-volume drugs facing generic competition, member cost share has steadily declined since 2003, reversing course briefly in 2014 due to copay increases for generic and preferred brand tiers of drugs. Member cost share declined from 8.8% in 2017 to 8.3% in 2018. On average, members paid $12.89 per prescription and the plan paid $143.12, up from $124.39 per prescription in 2017. Drug plan members paid $13.0M in total out-of-pocket cost, an increase of 9.0% from 2017. In comparison, the plan paid $144M on their behalf, an increase from $124M paid in 2017. The university continues to provide value to our members with cost share significantly lower than national values.

**Table 8**: Member Copays (30-Day Supply)

| Drug Type | U-M Prescription Drug Plan | National Benchmark* |
|---|---|---|
| Generic | $10 | $12.21 |
| Preferred Brand | $20 | $31.99 |
| Non-Preferred Brand | $45 | $57.12 |

**Source:2018 PBMI Trends in Drug Benefit Design*

Currently, all union groups have our standard copayment structure, except the Michigan Nurses' Association, which currently has lower copays than other plan members.

### *Member Utilization*

In 2018, 76.0% of eligible members utilized their drug plan benefit, down 1.0% from 2017. The number of eligible members increased to 112,574, a 3.4% increase over the previous year and a normal growth rate for the university. The average number of prescriptions per eligible member declined 2.0% from 2017 to 2018, to 8.95: 7.1 for active employees, 20.6 for retirees and 28.4 for long-term disability members. The average day supply per claim increased from 46 days to 48 days. When prescriptions are normalized to a 30-day supply our overall utilization rate increased 1.1%, from 14 30-day prescriptions per member in 2017 to 14.2 30-day prescriptions in 2018.

A strategic goal for 2018 was to increase the day supply percentage of maintenance drugs filled at 90-day retail and mail order for better patient adherence and reduced cost. Studies have shown that 90-day supply claims are associated with better patient adherence and the distribution channels of 90-day retail and mail order provide the best contracted rates. To improve our 90-day fill rate on maintenance drugs, we have engaged in strategic quarterly member lettering promotions. The overall 90-day fill penetration (all claims) increased from 66.3% in 2017 to 68.7% in 2018. In 2018, 75.8% of maintenance drugs were dispensed as 90-day supplies, an improvement over the 2017 rate of 73.3%, resulting in an estimated $290K in ingredient cost savings.

## Specialty Pharmacy

Specialty drugs, including self-administered injectables, drugs that require special monitoring, and high-cost oral drugs, are of significant concern when assessing cost drivers and future plan cost. Of the 59 newly approved FDA drug entities in 2018, 35 fall under the pharmacy benefit, and 29 of these are considered specialty. In many cases, the new specialty products provide therapeutic advances in various clinical conditions among small groups of patients and are priced at a premium cost. Despite much promise for the emergence of biosimilars and lower-cost generics within this category, the majority of specialty drugs dispensed continue to be brand-name products with no generic equivalent or interchangeable biologic.

The university partners with Michigan Medicine's Specialty Pharmacy to provide high-touch, value added services for members in need of specialty pharmaceuticals. These services include, but are not limited to, personalized onboarding, financial assistance coordination, clinical pathways assessment and prescription verification, proactive refill outreach to all patients for adherence enhancement, and utilization of patient care monitoring platforms for clinical reassessment by highly trained pharmacist staff members. Michigan Medicine Specialty Pharmacy processes specialty medications for members, with few exceptions for limited distribution drugs that are only fillable through manufacturer-designated pharmacies.

Specialty drugs represented only 1.6% of all claims in 2018, up from 1.4% in 2017, yet accounted for more than 41.1% of total drug cost (plan cost plus member cost), up from 38.6% in 2017. A total of 16,324 specialty drug claims were paid at a plan cost of $64M, a 23.3% increase in cost over 2017. The average ingredient cost of a specialty drug was $3,958.81 per prescription, with an average day-supply of 32 days.

### *Anti-Inflammatory Agents*

The self-administered, injectable anti-inflammatory class of drugs commonly used to treat inflammatory diseases such as rheumatoid arthritis, Crohn's disease, ulcerative colitis, and psoriasis continued to be the number one area of specialty drug expenditures in 2018. The plan spent $25.1M for these products, an increase of 28.7% compared to 2017. Utilization of these agents increased 16.0% in 2018, and the average prescription plan cost increased by 10.7%. Adalimumab (Humira) represented $12.6M (50.2% of class cost) with a 23.8% increase in plan cost, driven by price inflation of 9.9% and an increase in utilizers by 9.5%.

Baricitinib (Olumiant) was the only novel self-administered anti-inflammatory agent approved in 2018; however, it did not contribute to plan spend for the year. Several previously approved agents received expanded approvals in 2018. Two of the more notable medications in this area that gained additional indications include certolizumab pegol (Cimzia), approved for plaque psoriasis, and dupilimab (Dupixent), approved for moderate-to-severe asthma. Dupilimab had increased utilization in 2018, growing from 35 claims in 2017 to 115 claims in 2018.

Some drugs in this category are still seeing increases in spend from late 2017 approvals of expanded indications as well, further driving trend in this sector. Tofacitinib (Xeljanz) is one example of this, where plan costs increased more than 50% year over year, in part due to the December 2017 approval of its psoriatic arthritis indication.

### *Multiple Sclerosis and Oncology*

Multiple sclerosis and orally administered cancer medication made up the next two most expensive specialty drug classes. The number of members treated for multiple sclerosis on the pharmacy benefit declined 9.0% and the plan spend declined 8.2% in 2018, from $8.9M to $8.2M. The decline in the pharmacy benefit plan cost is related to the increase in utilization of ocrelizumab (Ocrevus) on the medical benefit and generic glatiramer (Copaxone) price reductions.

Oncology drug spend increased 31.9% from $10.3M in 2017 to $13.6M in 2018. This cost increase was driven by 12.4% increase in utilizers and 5.8% price inflation for the class. The three top oncology products in 2018 were lenalidomide (Revlimid, $3.0M), ibrutinib (Imbruvica, $1.0M) and palbociclib (Ibrance, $1.0M).

### *Human Immunodeficiency Virus (HIV)/Hepatitis C Virus (HCV)*

The FDA approved three HIV products in 2018, two of which are covered on the pharmacy benefit. One of the products is a new combination containing the alafenamide salt of tenofovir, bictegravir, and emtricitabine (Biktarvy), representing a new addition to the growing list of complete single tablet regimens. The other product, doravirine (Pifeltro), is intended to be used in combination with other antiretroviral agents for the treatment of HIV.

In 2018, more plan members were treated for pre-exposure prophylaxis (PrEP) therapy than had the virus. This important trend continued from 2017, signifying important strides in the prevention of HIV/AIDS. Emtricitabine/tenofovir disoproxil fumarate (Truvada) is the only therapy FDA approved with a PrEP indication; a fact that likely contributed to the additional $620,000 in total drug cost for this medication relative to 2017.

No new products to treat HCV were approved in 2018; however, authorized generic entries for Harvoni and Epclusa were approved late 2018, providing an important advancement in affordability of these regimens. Both agents are now available at a relatively low cost, while still providing cures in more than 95% of treated patients. The cost benefits of these generically available therapies will be realized in the 2019 year and beyond. In 2018, the plan was able to provide access to treatment for 10 members with HCV. This care was coordinated through Michigan Medicine's Specialty Pharmacy, who through clinical program management achieved 100% cure rates for members in which a 12 week or later lab result was available.

### *Cystic Fibrosis*

The cystic fibrosis transmembrane conductance regulator (CFTR) modulators are the fastest-growing drug class in terms of cost per treatment, and will likely continue to grow in 2019. In 2018, tezacaftor/ivacaftor (Symdeko), a CFTR modulator, was approved for use in individuals with CF. Symdeko joins lumacaftor/ivacaftor (Orkambi), and ivacaftor (Kalydeco) in this class of medications, which contributed to more than $1.4M in plan spend in 2018.

### *Biosimilars and the Specialty Pipeline*

A biosimilar is a biological product that is approved based on demonstration of high similarity to another FDA-approved biological product in terms of safety and effectiveness. The hope is that biosimilar drugs will decrease

the costs of therapy in the same way that generic drugs did in the past. To date, 18 biosimilars for 9 different specialty products have been approved by the FDA, but only seven of the approved products are commercially available—filgrastim-sndz (Zarxio), infliximab-dyyb (Inflectra), infliximab-abda (Renflexis), pegfilgrastim-jmdb (Fulphila), filgrastim-aafi (Nivestym), epoetin alfa-epbx (Retacrit), and pegfilgrastim-cbqv (Udenyca). Biosimilar products for adalimumab (Humira) and etancercept (Enbrel), the plan's first and second products in overall spend, have been approved by the FDA, but litigation and manufacturing complications have pushed their estimated arrival date to beyond 2020.

The drug pipeline will continue to have a significant impact on specialty drug spend for the university. The pipeline is rich with drugs undergoing investigational studies in areas such as cancer, inflammatory conditions and orphan diseases. The plan will continue to monitor and assess innovative ways to provide members access to these products, while striving to sustain affordable health care for the university and its members.

***Current and Future Specialty Strategies***

Specialty pharmaceuticals continue to dominate the FDA approval landscape with more than 80% of 2018 FDA approvals, covered under the pharmacy benefit at the University, meeting this designation. The high proportion of specialty approvals, and thus specialty claims, is a reality that appears to continue as we look into the 2019 pipeline and beyond. This trend provides an opportunity for creativity, collaboration and innovation to help manage these costs while continuing to maintain our commitment to providing evidence-based access for our members.

One example of a cost containment initiative that the plan will be looking to leverage in 2019 and beyond is dose optimization. Dose optimization is a fill strategy that maximizes the efficiency of manufacturer pricing to provide equivalent doses to members at a lower cost to the plan. This strategy aims to provide savings to the plan while generally enhancing patient access or reducing pill burden in the process, resulting in a win-win for the plan and its members.

Through claim review and knowledge of drug pricing, the plan identifies opportunities for dose optimization and operationalizes them when possible with hard coded quantity limits by dosage form and/or strength. Our collaborative partnership with the Michigan Medicine Specialty Pharmacy has been, and will continue to be, integral to operationalizing these creative strategies in the future. In 2018, the specialty pharmacy, through provider outreach and prescription coordination, helped employ optimization strategies with erenumab-aooe (Aimovig) and secukinumab (Cosentyx), based on product pricing and packaging opportunities.

Another major ongoing initiative in this space is an evaluation of medical and pharmacy specialty drugs to identify opportunities for improved management. Late in 2017, a site of care management for medically administered drugs was implemented. This initiative, along with the ongoing collaborative partnership between the university and the health system, has led to a projected annual savings of $16.4M.

The university is currently working on several new, novel utilization management initiatives designed for sustainable health care cost while maintaining comprehensive coverage and access to care for our members. Several evaluations of the clinical and economic impact of plan coverage policies were completed and presented in 2018, and the plan will continue to investigate opportunities in tier strategy, value-and outcomes-based agreements, medical drug/pharmacy copay parity, new start wastage mitigation, oversight and management of specialty spend.

## Clinical Administration

### *Leveraging Expertise*

The plan's clinical staff continues to leverage internal and external resources to provide sound, evidence-based recommendations for formulary additions and clinical management. These collaborations will gain importance as the number of specialty and orphan drugs come to market at an increasingly rapid pace in the future.

Consulting with specialist physicians within the university helps establish rational guidelines for the use of medications that are consistent with practices used at Michigan Medicine. We have found that by consulting with experts, particularly those who may have participated in clinical studies on drugs or disease states, we have been able to make better-informed decisions. Plan pharmacists attend the monthly Pharmacy and Therapeutic (P&T) Committee meetings and the Cancer Pharmacy Committee at Michigan Medicine, in addition to collaborating with specialists.

Plan pharmacists also observe quarterly P&T Committee meetings at MedImpact, where they are exposed to the expertise of nationally recognized specialists in a variety of disease states. MedImpact's Clinical Program Manager assigned to the university account is another excellent source of clinical expertise, information about drugs in the research pipeline, benchmarks and competitive insights.

Plan pharmacists' professional development, networking, and continuing education activities include membership and conference attendance for Academy of Managed Care and Specialty Pharmacy (AMCP), Asembia, Pharmacy Benefit Management Institute (PBMI) and various preceptor conferences.

### *Drug Reviews, Indications and Utilization*

The plan's clinical pharmacists review newly approved drugs and other changes each week to identify drugs that will require review by the Pharmacy Benefit Advisory Committee (PBAC). Formulary recommendations and clinical guidelines are presented to PBAC during monthly meetings. In 2018, the drug plan reviewed 52 drugs (FDA newly approved; previously FDA approved, but newly available in market; significant administrative dosage form changes).

In addition to new drug reviews, the team monitors the market for new approved indications and plan utilization to assess the appropriateness of use by plan members. In 2018, 35 drug prior authorization guidelines and utilization management changes were brought to PBAC for consideration.

The drug plan also conducts periodic reviews of various drug classes for the purpose of ensuring safe, appropriate, and cost effective utilization. These reviews incorporate professional input from the plan's clinical staff as well as subject matter experts from Michigan Medicine. In 2018, the plan developed and presented 21 drug class reviews to PBAC.

### *Drug Use Evaluation (DUE) Programs*

Quarterly drug utilization reviews are conducted to assure safe and effective utilization of prescription drugs by plan members. The goal of these DUE programs is to improve the quality of care and avoid potential complications of drug therapy.

The university has three continuous retrospective DUE programs: Asthma Management, Opioid Overutilization, and Controlled Substances Overutilization. These programs look at past pharmacy claims to identify potential safety and utilization management issues. Physicians are notified via letter of any patients that have been identified using the pre-specified criteria.

The Asthma Management Program identifies members with four or more claims for asthma rescue medications without medications to prevent asthma exacerbations over a 12-month timeframe. Claims data for asthma

medications are analyzed each year during the second quarter. In 2018, 177 patients were identified as meeting the above criteria and letters were mailed, an 11.9% decrease from 2017. Reevaluating claims utilization from letters mailed in 2018 shows that 37.0% of the patients had added preventive medications to their treatment regime.

The Opioid Overutilization DUE Program was updated to identify members receiving an average of greater than 90 mg morphine milligram equivalent (MME) doses per day of opiates in the previous six months. The reduction in the MME threshold from 120 mg to 90 mg resulted in a six fold increase members identified. Physician mailings were sent quarterly. Quarterly outcomes reported an average success rate of 36.0% in 2018, where success was defined as the member did not meet criteria in the outcomes measurement period.

The Controlled Substances Overutilization Program identifies members filling 10 or more controlled substance prescriptions over a three-month period. In 2018, we saw a 24.5% reduction in members identified as meeting criteria in each quarter as compared to 2017. The controlled substances overutilization program yielded an average 59.8% success rate. Success was defined as the member did not meet criteria in the outcomes measurement period.

***Opioid Epidemic***

National attention has been given to the opioid epidemic over the past few years. Together with a multi-disciplinary cross-campus initiative and MedImpact, the prescription drug plan is actively addressing opioid utilization among its members. Our current efforts include the two DUE programs described above, utilization management (maximum daily dosing and prior authorization) and a point-of-sale edit limiting new starts to a seven-day supply, implemented on July 1, 2018.

Based on the Centers for Disease Control and Prevention opioid list, the plan paid $1.5M for opioid-containing products in 2018, down 6.2% from 2017. Compared to 2015, the number of utilizers per one thousand eligible members declined by 30.0%, and the average quantity per utilizer has declined 27.4%.

***Mail Order Pharmacy***

NoviXus Pharmacy Services completed its seventh full year of service in 2018, and is the largest volume pharmacy for the plan. In 2018, 88,046 prescriptions (8.7% of total) were dispensed via mail order with a total drug cost of $18.3M, a 1.5% increase in volume and $2.0M increase over 2017. Members paid $1.5M in copays at the mail pharmacy for 2018, virtually the same as 2017.

Members consistently rate NoviXus as excellent. In 2018, over 5,576 customer calls were handled by NoviXus staff. The average speed to answer a phone call was 22.8 seconds. The majority of prescriptions are transmitted by e-prescribing. NoviXus dispensed 88,046 prescriptions in 2018, with most prescriptions requiring no intervention and 10,079 requiring intervention to clarify information from the patient or prescriber. The average turnaround time for a prescription filled at NoviXus is less than one day, even when intervention is required. Since NoviXus is located in Michigan, prescriptions arrive in the mail more quickly than with the university's previous mail order providers. In many cases, members receive their refill the day after ordering their medication.

***Comprehensive Medication Reviews***

For all members, except Medicare-eligible retires, Comprehensive Medication Reviews (CMR) is included in our medical plan rates. In 2013, the Michigan Medicine Medical Group (MMMG) was selected to provide CMR services for Medicare-eligible members on a pilot basis. The pilot intervention focused on medication effectiveness, safety and cost with goals to improve medication adherence, control costs and determine whether CMR should be included as a standard operational component of quality prescription drug plan management for our members.

The pilot program yielded an outstanding 46.0% CMR completion rate (only 6.8% of CMS Medicare Part D plans had completion rates greater than 40.0% in 2015). Successful interventions included improved disease control

(57.3%), safety (27.5%), and cost (15.2%). The plan was able to save $2.12 for every $1 spent on the program. Participating members consistently rate the experience as very helpful, saying they are satisfied and would be very likely to recommend a CMR.

Based on the success of this pilot program, the plan and MMMG have moved into a CMR operational phase for all Medicare-eligible retirees. In 2018, a total of 342 CMRs were completed, of which 48 Medicare-eligible retirees scheduled and completed a comprehensive medication review and 19 completed follow-up evaluations.

### *Active Switch Programs*

In 2007 and 2008, during the "generic cliff" period, the Benefits Administration Office engaged the Michigan Medicine Pharmacy Innovations and Partnerships group (previously known as the Medical Outcomes Program) to conduct provider and member intervention switch programs to move members from brand drugs to lower cost, therapeutically equivalent, in-class generics. Based on the success of these previous switch programs, we completed contracting with Michigan Medicine for ongoing active switch programs as opportunities arise.

The first active switch program initiated under the new contract in late 2017 was for brand DPP-4 inhibitors to generic alogliptin for the treatment of diabetes. In 2018, this program was estimated to save the plan $0.17 PMPM. An abstract and poster presentation of this program was awarded a gold-ribbon at the 2019 AMCP Annual Meeting. Additional active switch programs initiated in 2018 included converting members to lower-cost insulin and fluoxetine products. In total, the Michigan Medicine pharmacists converted 358 members to lower-cost alternatives in 2018. The plan is currently evaluating several future active switch program opportunities for 2019, including brand combination inhaled corticosteroid/long-acting beta agonist (ICS/LABA) inhalers to generic fluticasone/salmeterol (AirDuo and Advair Diskus) for COPD/asthma treatment.

### *E-Prescribing*

Michigan Medicine physician e-prescribing was implemented in 2010 to improve accuracy, efficiency, safety and member convenience. Overall prescriptions submitted electronically represented 77.2% of all claims in 2018, up 5.9% from 73.6% in 2017. We continue to monitor the ongoing legislative activity around mandating specific drug classes or all prescriptions to be e-prescribed.

### *E-prior authorization*

Through our PBM, MedImpact, electronic prior authorization is available to our providers via both Surescripts and CoverMyMeds. While the uptake of e-prior authorization has been slow, the plan will continue to work on promotional efforts through 2019.

## 2019 Priorities

Major projects targeted by the drug plan for 2019 include:

1. Complete RFP for PBM services for fiscal responsibility and improvements of services.
2. Explore additional brand to generic active switch programs.
3. Improve e-prior authorization utilization.
4. Continue evaluation of medical and pharmacy specialty drugs to identify opportunities for cost containment, cost share parity and improved management.
5. Evaluate the impact of adding a specialty copay tier level.
6. Evaluate medical drug to pharmacy copay parity.
7. Evaluate new start wastage mitigation strategies.

For additional information on the prescription drug plan, contact:

- Dawn Parsons, RPh, MBA, Plan Manager – dparsons@med.umich.edu
- Stephen Lott, PharmD, MS, CSP, Lead Clinical Pharmacist – stlott@med.umich.edu
- Michael Phalen, PharmD, CSP, Clinical Pharmacist Specialist – mjphalen@med.umich.edu