

Executive Summary

Calendar year 2016 was the fourteenth year of operation for the university’s self-administered prescription drug plan. In 2016, the \$117M plan cost represented 22% of the university’s \$533M total spend on health benefit programs. With the inclusion of the medical drug spend, drug cost represents 30% of the university’s total spend on health benefit programs. Growth in membership, increased utilization, high-cost specialty drugs and inflation contributed to a gross 5.9% increase in total drug cost in 2016, down substantially from the 14.0% increase in 2015. On a per-member basis, self-management held the total drug cost increase to just 3.2% in 2016. Specialty drug spending continues to grow despite representing only 1.7% of all claims. Gross total cost for specialty drugs rose 13.6% (or 10.7% on a per-member basis) in 2016, representing 36.5% of total pharmacy costs.

The pharmacy benefit team continues to leverage clinical expertise and innovative strategies to control costs, improve outcomes and support university objectives. While the U-M trend has historically remained below national benchmarks, more aggressive approaches related to specialty drugs and member cost share may be needed going forward as pharmacy spending increasingly contributes to higher health care costs for the university.

2016 Cost and Utilization Metrics

Below is a snapshot of key performance metrics based on an average 105,359 eligible members per month, a 2.7% increase in membership over 2015. Eligible membership has grown approximately 2.6% per year for the last five years.

	All Claims		Non-Specialty		Specialty	
	Cost and Utilization	Change from 2015	Cost and Utilization	Change from 2015	Cost and Utilization	Change from 2015
Claim Volume	974,361	3.0%	957,925	2.6%	16,436	7.6%
Utilizing Members	81,350	0.2%	81,282	2.6%	2,684	6.2%
Total Drug Cost	\$128,804,933	5.9%	\$81,816,488	1.9%	\$46,988,445	13.6%
Plan Cost	\$117,228,483	7.3%	\$70,641,375	2.6%	\$46,587,107	15.3%
Member Cost	\$11,576,450	-6.1%	\$11,175,112	-1.7%	\$401,338	-57.8%
Percent Member Total Cost Share	9.0%	-1.1%	13.7%	-0.5%	0.9%	1.4%
Total Drug Cost PMPM*	\$101.88	3.2%	\$64.71	-0.7%	\$37.17	10.7%
Plan Cost PMPM	\$92.72	4.5%	\$55.87	-0.1%	\$36.85	12.3%
Member Cost PMPM	\$9.16	-8.5%	\$8.84	-4.3%	\$0.32	-58.5%
Average Number of Claims PUPY**	12.0	0%	11.8	0.0%	6.1	1.3%
Average Day Supply Per Claim	45	0.0%	45	0.0%	32	0.0%

*PMPM = per (eligible) member per month

**PUPY = per utilizing member per year

2016 Tier Utilization

Drug Tier	Paid Claims	% Total Claims			% Plan Cost		
	2016	2016	2015	Change	2016	2015	Change
Tier 0 – \$0 Copay	61,389	6.3%	6.1%	0.2%	11.2% (\$12.9M)	10.8%	0.4%
Tier 1 – Generics	818,272	84.1%	83.3%	0.8%	19.7% (\$22.8M)	21.2%	-1.5%
Tier 2 – Preferred Brands	56,596	5.8%	6.1%	-0.3%	55.3% (\$64M)	53.2%	2.1%
Tier 3 – Non-Preferred Brands	36,936	3.8%	4.4%	-0.6%	13.8% (\$16M)	14.4%	-0.6%

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 including contraceptive products for females. Excludes 'paper' claims.

Plan Operations and Administration

Vendors and RFPs

Contracts for Pharmacy Benefit Manager (PBM), specialty pharmacy and mail order pharmacy were renewed in 2016, yielding an estimated savings of \$11.7M.

- The PBM contract with MedImpact Healthcare Systems, Inc. was renewed effective January 1, 2016 for three years with improved network rate guarantees, for a savings of \$7.0M in 2016.
- The specialty pharmacy contract with the Michigan Medicine Department of Pharmacy was renewed effective October 1, 2016 for two years with a new rate structure and reduced administrative burden, for an estimated savings of \$4.5M in 2016.
- The mail order pharmacy network contract with NoviXus was renewed effective September 1, 2016 for three years with improved rates, for an estimated savings of \$246K in 2016.

Benefits Administration Office Staffing

The Prescription Drug Plan Manager, Keith Bruhnsen, moved to phased retirement in 2016. A candidate search was completed in the spring of 2016 and Dawn Parsons was hired effective August 1, 2016. Dawn was Lead Clinical Pharmacist for the plan between 2003 and 2010, returning to the university with added experience from two PBMs and a large claims auditing firm.

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 started a Pharmacy Residency Training Program in July 2016. Our first resident will complete his rotation in June 2017 and we expect full accreditation to be awarded sometime in the fall of 2017. Our residency program is unique in that it offers real-world learning in all aspects of Pharmacy Benefit Management, including member support and communication, formulary management, and network and vendor management. Word of our quality learning experience has resulted in a 57% increase in the applicant pool for the 2017-2018 U-M BAO Pharmacy Residency. This program underscores our commitment to 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 \$801,348 for the State of Michigan Health Insurance Claims Assessment (HICA) insurance claims tax in 2016, an increase of 62.5% from 2015. The HICA tax rate will increase to 1% in 2017.

Administration of the Medicare Part D Retiree Drug Subsidy (RDS), which was handled internally since 2006, was transitioned to Truven Health Analytics starting in 2015. The Centers for Medicare and Medicaid Services continue to pay the drug plan for the RDS based on eligible claims. For 2016 the amount received was \$3.6M.

Requirements under the Affordable Care Act (ACA) continued to impact the plan in 2016. 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; 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 in 2016 were \$12.9M including \$1.5M in member copay relief. Contraceptives received the majority of copay relief at \$879K, followed by insulin and diabetic supplies at \$492K.

In the past, the plan's infertility benefits were limited to \$5,000 per family per lifetime. Because dollar limits are not permitted under the ACA (effective in 2014), the plan 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. Overall plan expenditures for infertility medications declined 35.9% from a high of \$1.5M in 2015 to \$974K in 2016. We believe that the warehoused demand for IVF procedures and the corresponding drugs may be addressed and that we are potentially moving into a steady state demand level. A retrospective review shows that the average plan cost for a member using infertility medications with a five claim limit is approximately \$8,814 per lifetime. We will conduct a comprehensive review of infertility drug coverage in 2017.

We continue to actively monitor the legislative and regulatory landscape with regard to the Affordable Care Act in order to be as prepared as possible to respond to any changes that may occur under the new presidential administration.

Cost Management

Plan Cost

In 2016, the total plan cost including MedImpact administrative fees and state taxes was \$124M. The plan cost based solely on drug and dispensing fees represented 22% (\$117M) of the \$533M university cost for medical and drug benefit programs. Specialty drug utilization was the overwhelming main cost driver in 2016.

The cost of drug claims billed through the medical benefit was \$44.8M in 2016. Together, medical and pharmacy drug claims made up 30% (\$161.8M) of the \$533M university cost for medical and drug benefit plans.

A total of 974,361 prescriptions were dispensed at a total plan cost of \$117.2M in 2016, a 7.3% increase from 2015. The university paid \$92.72 PMPM (\$1,112.64 PMPY) for drug claims, a 4.5% increase in plan PMPM compared to 2015. Plan cost for the retiree population was \$32.2M, representing 27.5% of the total plan cost, a 11.2% increase over 2015. The plan cost PMPM for retirees increased by 7.8% over 2015 to \$207.56. Expenditures for members in the long-term disability (LTD) program totaled \$5.4M, an increase of 13.9% over 2015. The plan cost PMPM for LTD members was \$429.62, over four times the overall average paid cost PMPM of \$92.72.

The average plan cost for a 30-day prescription increased only 3.1% from \$77.44 in 2015 to \$79.86 in 2016. In 2016, the overall aggregate discount from Average Wholesale Price (AWP) was -55.0% for combined retail and 90-day retail prescriptions, improved from -53.7% in 2015. While the plan benefited from more aggressive discounts from MedImpact network management, overall AWP inflation, particularly among generic medications, drove costs up.

Price inflation is occurring with brands as shown in average ingredient cost despite aggressive negotiated network discounts. The average ingredient cost of a single-source brand prescription increased by 14.9% in 2016 to an

average \$745 per prescription, mainly driven by high-cost specialty drugs. The average ingredient cost of a multiple-source brand prescription increased by 49.5% to an average \$585 per prescription. The average ingredient cost for a generic prescription decreased by 10.9% to an average cost of \$34.04 per prescription.

Trend

Total drug cost (combined university plan and member costs) PMPM increased only 3.2%, from \$98.76 in 2015 to \$101.88 in 2016. The Express Scripts 2016 Drug Trend Report has reported an overall 3.8% total drug cost PMPM trend for commercially insured plans managed by Express Scripts.

University Trend Component Comparison to Express Scripts (ESI)

	Utilization		Unit Cost		Total	
	U-M	ESI	U-M	ESI	U-M	ESI
Traditional	1.2%	1.3%	-1.9%	-2.3%	-0.7%	-1.0%
Specialty	9.3%	7.1%	1.4%	6.2%	10.7%	13.3%
Total	3.0%	1.3%	0.3%	2.5%	3.2%	3.8%

Source: Express Scripts 2016 Drug Trend Report

Factors Impacting Drug Cost in 2016 (in order of cost importance)

The following table provides an overview of the factors that impacted plan drug costs in 2016. Further details are provided elsewhere in this report.

Positive (Mitigated Trend)	Negative (Increased Trend)
<ol style="list-style-type: none"> 1. MedImpact renewal – better discounts at retail pharmacies, improved rebate guarantees, including specialty drugs. 2. Medicare Retiree Drug Subsidy 3. Generic and brand drugs – high generic dispensing rate; less preferred and non-preferred brand use; increased generic availability of top-selling brand name drugs 4. Mail order renewal – better discounts 5. Increased use of Michigan Medicine Specialty Pharmacy discounts on specialty drugs 6. Prior authorizations, step therapy and quantity limits, assuring appropriate use 	<ol style="list-style-type: none"> 1. Higher than typical price inflation 2. Addition of more high-cost specialty drugs, more indications, and increased utilization for specialty drugs 3. 2.7% Increase in eligible membership and 0.2% increase in utilizing members 4. Fewer patent expirations impacting generic dispensing rate 5. Declining member cost share 6. Increased cost shift of member copays for \$0 preventative drugs

The average percent of claims dispensed as generic increased from 85.2% in 2015 to 86.1% in 2016 (including both \$0 copay and Tier 1 claims). In 2017, the projected new to market generic entries only represents about 2.3% of our 2016 total drug cost; as a result, we expect a smaller increase in generic fill rate in 2017.

Specialty drug cost increases play a much bigger role in our overall trend than the slowing of brand to generic releases. As innovation shifts toward specialty drugs, we can expect to see the overall percentage of generic claims decline. The introduction of biosimilar products for biologic medications shows limited promise for price competition among specialty drugs in the future.

The 2016 low traditional drug trend helped to offset the double-digit specialty PMPM trend. Industry reports indicate that specialty drugs alone will represent 50% of all drug plan costs by 2018. If the university 2016 trend is projected forward, the university specialty drug cost will reach 50% of the total spend in 2020.

The top three traditional therapeutic classes for cost during 2016 included drugs to treat diabetes, HIV and asthma/COPD. During 2016, the plan spent \$14M for diabetes drug treatments, up from \$11.7M. Prices for insulin increased another 16% in 2016, on top of the 20% increase experienced in 2015. Insulin products accounted for \$1.3M of the \$2.3M increase in diabetic drug therapy cost in 2016. The HIV drug class is seeing

significant gross increases in cost due to a 26% increase in utilizers and drug inflation. The HIV drug total cost increased by 34.2% from \$2.6M to \$3.5M in 2016. The university is evaluating network initiatives and utilization management to mitigate future increases in this drug class.

New Drug Impact

In 2016, 26 of the 36 new drug entities reviewed by the Pharmacy Benefits Advisory Committee (PBAC) for formulary consideration were specialty drugs. In many cases, the new specialty products provide therapeutic advances in various clinical conditions among small groups of patients, and are therefore priced at a premium cost. These products often do not replace existing therapies but fill an unmet need.

In 2016, the new brand products of Ninlaro (antineoplastic), Saxendra (weight loss), Trilicity (diabetes), Epclusa (Hepatitis C), Genvoya (HIV), Odefsey (HIV), Natpara (hypocalcemia) and Trintellix (antidepressant) contributed \$1.5 million in total drug cost.

New generic entries which yielded the largest savings in 2016 were Abilify (antipsychotic) \$1.3M, Ortho Tri-Cyclen Lo (Contraceptive) \$358K, and Crestor (cholesterol) \$314K. Other new generics were Enablex (overactive bladder), Ederin (diuretic), Frova (migraine), and Valcyte (antiviral) which combined, added another \$62K in savings.

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 10.1% in 2015 to 9% in 2016. On average, members paid \$11.88 per prescription and the plan paid \$120.31, up from \$115.15 per prescription in 2015. Drug plan members paid \$11.6M in total out-of-pocket cost, a decrease of 6.1% from 2015. In comparison, the plan paid \$117M on their behalf, an increase from \$109M paid in 2015. Nationally, the member share of drug cost is approximately double what U-M members contribute. Unlike many employers, the university has not elected to have a fourth copay tier for specialty drugs. Both member cost share and a specialty drug tier will be evaluated for changes in the near future.

Member Copays (30-Day Supply)

Drug Type	U-M Prescription Drug Plan	National Benchmark*
Generic	\$10	\$10.85
Preferred Brand	\$20	\$31.08
Non-Preferred Brand	\$45	\$56.65

**Source: 2015-16 PBMI Cost and Plan Design Report*

Currently, all union groups have the standard copayment structure, except the Michigan Nurses’ Association, which currently has lower copays than other plan beneficiaries. In 2017, most union groups will be bargaining on behalf of their members for health care benefits, including prescription drug copays.

Member Utilization

In 2016, 77.2% of eligible members utilized the drug plan benefits, up 0.2% from 2015. The number of eligible members increased to 105,359, a 2.7% increase over the previous year, a normal growth rate. The average number of prescriptions per member remained unchanged from 2015 to 2016, at 9.2; 7.3 prescriptions on average for active employees, 21.5 prescriptions on average for retirees, and 30 prescriptions on average for long-term disability members. The average day supply per claim remained at 45 days.

Members continue to value the convenience of 90-day prescription fills through both retail locations and mail order. Total 90-day fill penetration increased from 58.3% in 2015 to 59.4% in 2016. Thirty-day normalized prescription utilization increased overall by 3.8% in 2016.

Specialty Drugs

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. The majority of specialty drugs dispensed are brand name products with no generic equivalent. In 2016, specialty drugs represented only 1.7% of all claims, yet more than 36.5% of pharmacy total drug cost (plan cost plus member cost, \$47M), up from 34% in 2015.

Growth in Cost and Utilization

In 2016, a total of 16,436 specialty drug claims were paid for 2,684 members at a plan cost of \$46.6M, a 15.3% increase over 2015. Specialty drug claim volume increased 7.6% as the number of members using specialty drugs increased 6.2% over 2015. The average ingredient cost of a specialty drug was \$2,824.60 per prescription, a 6.2% increase compared to 2015. The average day supply in 2016 remained at 32 days for a specialty drug.

The plan paid \$31.6M (67.8% of all specialty drug costs) for drugs in three classes (inflammatory, multiple sclerosis and oncology), up 22.5% from \$25.8M in 2015. Inflammatory specialty medications are used to treat diseases such as rheumatoid arthritis, Crohn's disease and psoriasis. The inflammatory drug class continued to be the number one area of specialty drug expenditures in 2016 with \$14.1M in plan cost. The number of utilizers for inflammatory drugs increased from 411 to 468 between 2015 and 2016.

Multiple sclerosis and orally-administered cancer medication made up the next two most expensive drug classes. The number of patients treated for multiple sclerosis decreased from 185 in 2015 to 179 in 2016, however plan costs still increased from \$8.1M to \$8.9M. Oncology drug utilization increased from \$6.9M in 2015 to \$8.6M in 2016, while the number of patients grew from 226 in 2015 to 261 in 2016.

Orphan Drugs

Orphan drugs are medications used to treat rare diseases which are generally defined as affecting fewer than 200,000 patients in the United States. The orphan designation was established in the early 1980s in order to provide incentives to pharmaceutical companies that previously avoided investing in research and development for treating those diseases.

Five orphan drugs were reviewed and approved by PBAC in 2016:

- Tagrisso (advanced non-small cell lung cancer) – Lung cancer is the leading cause of cancer death in the U.S., with an estimated 221,200 new diagnoses in 2015 for all types of lung cancer.
- Ninlaro (multiple myeloma) – It is estimated that there will be about 27,000 new diagnoses per year. Annual total drug cost is approximately \$95,000 per patient. Six U-M members were started on Ninlaro therapy in 2016.
- Upravi (pulmonary arterial hypertension) – Offers an additional treatment option for pulmonary arterial hypertension.
- Venclexta (chronic lymphocytic leukemia or “CLL”) – CLL is one of the most common types of leukemia in adults, with about 15,000 new diagnoses each year.
- Ocaliva (chronic liver disease, primary biliary cholangitis or “PBC”) – This rare liver disease affects about 400 patients for every million. Annual total drug cost is approximately \$67,000 per patient. One U-M member began Ocaliva therapy in 2016.

The university has three members utilizing the orphan drug Orkambi (cystic fibrosis), which was reviewed in 2015. Orkambi accounted for \$476K in 2016 total drug cost.

Biosimilars

The FDA established new pathways for approval of biosimilar specialty drugs several years ago. A biosimilar is a biological product that is approved based on a showing that it is highly similar to another FDA-approved biological product in terms of safety and effectiveness. The hope that biosimilar drugs would decrease drug costs through competition, similar to generic drugs, has been mitigated by the limited experience with biosimilars to date. The biosimilar to Lantus (diabetes), Basaglar, entered the market in December 2016 with only a 15% lower cost than Lantus. Biosimilars to Enbrel (rheumatoid arthritis/Crohn's) and Humira (rheumatoid arthritis/Crohn's) have been approved, however biosimilar-related patent disputes have prevented their launch.

Drug Pipeline

The pipeline for new drugs will continue to have a significant impact on specialty drug spend for the university. Currently, there are 77 drugs and 35 biologicals awaiting final review by the FDA.

Anticipated generic market entries for 2017 are expected for brand products that represented \$6.6M in university total drug cost. The most impactful drugs where generics are expected in 2017 include Advair Diskus (asthma, COPD), ProAir (asthma), Viagra (erectile dysfunction), Strattera (ADHD) and Pristiq (depression). Additionally, generics that entered the market in the second half of 2016, including generics for Zetia (cholesterol), Vagifem (estrogen) and Gleevec (oncology), are expected to yield additional savings in 2017.

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, drugs in the research pipeline, benchmarks and competitive insights.

Drug Reviews, Indications and Utilization

The clinical pharmacists review newly approved drugs and other changes each week to identify drugs that will require review by PBAC. Formulary recommendations and clinical guidelines are presented to PBAC during monthly meetings. In 2016, the drug plan reviewed 36 newly approved drugs, of which 26 were specialty drugs and only 10 were traditional medications. In 2016, the clinical team completed 36 drug class reviews to determine if tier placement changes were warranted based on current clinical guidelines and evidence.

In addition to new drug reviews, the team monitors the market for new indications for old drugs and plan utilization to assess the appropriateness of use by plan members. During 2016, 21 specialty drug and 13 traditional drug prior authorization guidelines were revised based on these changes.

In 2015, the plan stopped covering compounded medications made from bulk chemicals, with the exception of pediatric compounds where the formulation has been endorsed by the State of Michigan Standardized Oral

Liquids for Pediatrics collaborative. This compound policy coverage change resulted in a reduction in compound cost in 2016 to \$40K, down from \$216K in 2015.

Monitoring and Managing Inflation

A trend toward price inflation has been observed among brand and generic medications. Four especially meaningful examples in 2016 were EpiPen, Evzio, metformin ER 1000mg OSM (generic Fortamet), omeprazole-bicarb 40-1100 capsule (generic Zegerid).

EpiPen is an epinephrine auto-injection used for emergency treatment of anaphylaxis. With no generic available and no direct competitors, the manufacturer Mylan had a virtual monopoly. Mylan increased the price from about \$100 per pen to \$300 per pen over the last several years. EpiPen total cost increased by 36% in 2016, while the prescription volume increased only 8.7%. Due to public outcry Mylan has marketed an authorized generic where the cost is approximately 50% of the brand EpiPen.

Evzio is an auto-injectable of naloxone, which is a life-saving antidote to overdoses of opioids, manufactured by Kaleo. Kaleo increased the price from about \$733 per twin pack to about \$4,800. Utilization management drove all naloxone claims to the more cost effective product, Narcan Nasal spray.

Two generic products with significant price increases were metformin ER 1000mg (generic Fortamet) with a 218% price increase from \$6.18 per tablet to \$13.49 per tablet and omeprazole-bicarb 40-1100 capsule (generic Zegerid) with a 312% price increase from \$10.57 per capsule to \$32.99 capsule. PBAC has moved metformin ER 1000mg OSM to non-formulary and omeprazole-bicarb 40-1100 capsules requires prior authorization.

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 retrospective DUE programs: Opioid Overutilization, Asthma Management 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 Opioid Overutilization DUE Program identifies members receiving > 120mg morphine-equivalent doses (MED) per day of opiates for ≥ 90 consecutive days in the previous six months. Physician mailings were sent quarterly starting 1Q16. Quarterly outcomes reported success rates between 32% and 44%, where success was defined as the member did not meet criteria in the outcomes measurement period.

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. Each year during the second quarter, claims data for asthma medications are analyzed. In 2016, 195 patients were identified as meeting the above criteria and letters were mailed, a 7.6% reduction over 2015. Reevaluating claims utilization from letters mailed in 2015 shows that 46% of the patients had added preventive medications to their treatment regime.

The Controlled Substances Overutilization Program identifies members filling 10 or more controlled substance prescriptions over a three-month time period. Approximately 66 members per quarter were identified as meeting criteria in 2016, a 12% reduction over 2015. The controlled substances overutilization program yielded a 51%-52% success rate. Success was defined as the member did not meet criteria in the outcomes measurement period.

Special Initiatives

Medical and Pharmacy Specialty Drug Evaluation

A major ongoing initiative is the evaluation of medical and pharmacy specialty drugs to identify opportunities for cost containment, improved management and better coordination between the drug plan and the health plans. Approximately 49% of all specialty drugs are covered through the university medical plans and administered in outpatient facility clinics, infusion centers, home infusion and physician offices. In 2016 the total drug cost for medical drug claims paid was \$44.8M, with 77.6% of the claims administered in the higher-cost site of service, outpatient facility clinics. We are actively collaborating with our health plans to influence utilization management to ensure appropriate use and evaluating site of service initiatives.

Mail Order Pharmacy

NoviXus Mail Services completed its fifth full year of service in 2016 and the agreement was renewed for another three years. NoviXus is the largest volume pharmacy for the plan. In 2016, 84,466 prescriptions (8.7% of total) were dispensed via mail order with a total drug cost of \$16M, a 4.7% increase in volume and \$1.9M increase over 2015. Members paid \$1.6M in copays at the mail pharmacy for 2016, virtually the same as in 2015.

Members consistently rate NoviXus as excellent. In 2016 over 9,787 customer calls were handled by NoviXus staff. The average speed to answer a phone call was 14.58 seconds. The majority of prescriptions are transmitted by e-prescribing. NoviXus dispensed 84,466 prescriptions in 2016 with most prescriptions requiring no intervention and 4,541 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 2016 the university continued a communication plan developed by the UHR Communications group to increase voluntary use of mail order for maintenance medications. Promotions are ongoing with print, home mailings, campus ads, electronic media, animated enrollment video, email, social media and campus presentations. A very modest increase of new enrollments (2%) and prescriptions occurred in 2016, improving the mail order dispensing rate from 8.5% (2015) to 8.7% in 2016. Since 2014, the communications campaign has contributed to a shift of approximately 19,000 30-day prescriptions to mail order (for about 6,000 new 90-day mail order prescriptions), driving a savings of more than \$300k for the university and \$100k for members. We will continue to promote mail order and evaluate innovative communication strategies to improve response rates in conversation to mail order.

Comprehensive Medication Reviews

In 2013, the University of Michigan Medical Group (UMMG) pharmacist group was selected with data support from the College of Pharmacy faculty to provide Comprehensive Medication Reviews (CMR) for drug plan 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 completed pilot program yielded an outstanding 46% CMR completion rate. Only 6.8% of CMS Medicare Part D plans had completion rates greater than 40% in 2015. Successful interventions included improved efficacy (57.3%), safety (27.5%), and cost (15.2%). Efficacy is defined as improving disease control. For every \$1 added in cost due to the intervention, there was \$2.12 deleted. 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 the pilot program we are moving into the operational phase. For our active employee members, the CMR is included in our medical plan capitation rates. For our Medicare eligible members, we will continue offering CMR through the operational processes established during the pilot.

Safe Drug Disposal Events

Drug plan staff supported the U-M Campus-Wide Safe Drug Disposal working group and provided an incubator, publicity and communications for spring and fall drug "take back" days on the Ann Arbor campus. College of Pharmacy faculty and U-M Police Department community relations worked with the Great Lakes Clean Water Alliance and Advanced Care Pharmacy Services to help pharmacy students collect and destroy a total of 810 pounds of unwanted medications during the two days, including 75 pounds of controlled substance drugs. The "take back" events take place biannually in April and October. Since 2014, more than 1,782 pounds of unwanted medications have been collected and appropriately destroyed.

E-Prescribing

Michigan Medicine physician e-prescribing was implemented in 2010 to improve accuracy, efficiency, safety and member convenience. Overall prescriptions submitted electronically represented 63.1% of all claims in 2016, down 2.7% from 2015.

2017 Priorities

Major projects targeted by the drug plan for 2017 include:

1. Complete accreditation of our prescription drug plan managed care pharmacy residency program.
2. Complete new contract for ongoing CMR services with University of Michigan Medical Group.
3. Implement CMR ongoing operational processes.
4. Revise the plan dashboard and required reporting for plan performance monitoring.
5. Continue evaluation of medical and pharmacy specialty drugs to identify opportunities for cost containment and improved management.
6. Monitor mail pharmacy utilization and assess the effectiveness of the communication campaign to encourage the use of mail order and capture additional savings.
7. Implement limited network initiative to leverage better network rates on HIV drugs.
8. Conduct an analysis to determine the feasibility and benefits of moving from the current RDS subsidy payment to the Employer Group Waiver Plan (EGWP) prescription drug plan model.
9. Evaluate the impact of adding a specialty copay tier level.

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