

March 1, 2021

Re: OPM Pharmacy Benefits – Notice ID 24322621R0004

The undersigned organizations appreciate the opportunity to provide the Office of Personnel Management (OPM) with feedback on their request for comment regarding pharmacy benefits. Collectively, we represent 1200 members from over 800 organizations.

We applaud OPM for its efforts to improve the Federal Employee Health Benefits Program by optimizing pharmacy benefits. At present, nearly 70% of Americans take at least one prescription medicine per month, 50% take two or more per month and 20% are on five or more prescription medications at any time.¹ Medications are the first line of therapy to treat patients with chronic diseases and acute complex diseases such as cancer and heart disease. Medication breakthroughs have made it possible for more Americans to live longer, healthier lives. However, these breakthroughs also brought new challenges and higher costs. Lack of proper medication oversight and management can result in suboptimal therapeutic outcomes and patient harm, including avoidable illness (plus attendant hospitalizations) and death. The human and financial toll of inappropriate medication use is calamitous, contributing to 275,000 avoidable deaths in 2016 and an annual cost of more than \$528 billion – approximately 16% of the annual \$3.2 trillion in U.S. health care expenditures.² Optimizing medication use through comprehensive medication management (CMM) in practice would decrease waste and protect patients while reducing systemic costs.

Below, we detail how team-based CMM can improve patient outcomes and reduce health care costs. We also identify current barriers to widespread uptake of CMM and offer suggestions for increasing access to these vital services. These recommendations are grounded in evidence-based practice and are supported by quality and outcomes data.

I. Comprehensive Medication Management is an Essential Element of a Robust Pharmacy Benefit

Historically, the pharmacy benefit has often been narrowly construed as simply prescription drug coverage and formulary management. However, as pharmacy practice has evolved and therapeutic regimens have become more complex, comprehensive and integrated medication management services have become increasingly essential to an effective person-centered, outcomes-oriented pharmacy benefit program. To ensure that individuals are optimizing medication use, pharmacy benefit plans should cover CMM provided by an interprofessional health care team, including a clinical pharmacist. CMM is a systematic approach to medications where physicians and pharmacists ensure that those medications (whether they are prescription, non-prescription, alternative, traditional, vitamins or nutritional supplements) are:

- *individually assessed to determine that each medication is appropriate for the patient;*
- *effective for the medical condition;*
- *safe given the comorbidities and other medications being taken; and*

¹ Watanabe JH, McInnis T, and Hirsch. Cost of Prescription Drug—Related Morbidity and Mortality. *Annals of Pharmacotherapy*. 2018; 52(9): 829-837.

² See Zhong W, Maradit-Kremers H, Sauver JL, Yawn BP, Ebbert JO, Roger VL, et al. Age and Sex patterns of Drug Prescribing in a Defined population. *Mayo Clinic Proceedings* 2013;88(7):697-707; See also New England Healthcare Institute. Thinking Outside the Pillbox A System-wide Approach to Improving Patient Medication Adherence for Chronic Disease A NEHI Research Brief—August 2009. https://www.nehi.net/writable/publication_files/file/pa_issue_brief_final.pdf.

- *able to be taken by the patient as intended.*³

CMM is more rigorous in process and purpose,⁴ and is team-based, information-focused, supported by diagnostics (like pharmacogenomics), iterative and more patient-centric than traditional medication therapy management (MTM), which is typically provided under Medicare Part D and by commercial plans. Although MTM provides an annual review of medication therapy, it can often be limited to episodic, siloed care. In contrast, comprehensive medication management (CMM) was developed to address the shortcomings of MTM. CMM is an ongoing, patient-centered, comprehensive approach to optimizing medication use and improving patient health outcomes, delivered by a clinical pharmacist working in collaborative practice with the patient and other health care providers.^{5,6}

Data shows that CMM benefits the health care system through lower hospital readmission rates, increased adherence and improved clinical outcomes.⁶ The financial return on investment for CMM services “average[s] around 3:1 to 5:1 and can be as high as 12:1, resulting in a reduction in the direct mean medical cost of between \$1200 and \$1872 per patient per year for each of the first five years for those patients with chronic diseases such as diabetes, cardiovascular health issues, asthma and depression.”⁷ A 2018 study including more than 43,000 patients found that patients who had received a CMM visit within 30 days post discharge had a significantly lower rate of readmissions compared to the comparator cohort. The 60-day readmission rate was also lower.⁸ CMM has also been shown to improve population health, enhance individual care experience and improve physician satisfaction.^{9,10}

CMM provides significant benefit for chronic disease patients through optimized medication use and improved health outcomes. Patient engagement as part of the CMM process of care addresses medication therapy problems beyond adherence. For instance, inadequate therapies (dose too low, different or additional drug needed or wrong drug) account for more than half of the medication problems encountered (56%), while adherence is less than 15%.¹¹ CMM allows for a process to identify those that have not achieved clinical goals of therapy, target the correct therapies and evaluate medications as safe, effective and appropriate. Additionally, optimizing medication therapy among patients with diabetes, hypertension, hypercholesterolemia and congestive heart failure reduces

³ *The Patient-Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient Outcomes*. 2nd ed. PCPCC Medication Management Task Force collaborative document. <https://icpp.net/wp-content/uploads/2015/09/PCPCCmedmanagement.pdf>

⁴ The CMM process is explored in a greater depth in *The Patient Care Process for Delivering Comprehensive Medication Management (CMM): Optimizing Medication Use in Patient-Centered, Team-Based Care Settings*. CMM in Primary Care Research Team. July 2018. http://www.accp.com/cmm_care_process, which is attached as Appendix A of this document.

⁵ CMM vs MTM Patient focused process vs medication focused activity <https://gtmr.org/blog-cmm-vs-mtm-patient-focused-process-vs-medication-focused-activity/>

⁶ Sapp E., Francis S., Hincapie, A. Implementation of Pharmacist-Driven Comprehensive Medication Management as Part of an Interdisciplinary Team in Primary Care Physicians’ Offices. *The American Journal of Accountable Care*. 2020;8(1):8-11.

⁷ Watanabe JH, McInnis T, and Hirsch. Cost of Prescription Drug—Related Morbidity and Mortality. Related Morbidity and Mortality. *Annals of Pharmacotherapy*. 2018; 52(9): 829-837.

⁸ Budlong, H., Brummel, A., Rhodes, A., Nici, H. Impact of Comprehensive Medication Management on Hospital Readmission Rates. *Population Health Management*. 2018.

⁹ See, e.g., McFarland, S., Lamb, K., Hughes, J., Thomas, A., Gatwood, J., Hathaway, J. Perceptions of Integration of the Clinical Pharmacist into the PCMH Model by the PCMH Team. *Journal for Healthcare Quality*. 2017. doi:10.1097/JHQ.000000000000114; Funk, K., Pestka, D., McClurg, M., Carroll, J., Sorensen, T. Primary Care Providers Believe That Comprehensive Medication Management Improves Their Work-Life. *Journal of American Board of Family Medicine*. 2019; 32(4): 462-473. doi: 10.3122/jabfm.2019.04.180376; McFarland, MS, Nelson J, Ourth H, Groppi J and Morreale A. Optimizing the primary care clinical pharmacy specialist: Increasing patient access and quality of care within the Veterans Health Administration. *J Am Coll Clin Pharm*. 2020;3:494-500.

¹⁰ For additional discussion of the ROI for CMM provision, please see the Employer Toolkit attached at Appendix B to this document.

¹¹ American College of Clinical Pharmacy (ACCP). *Comprehensive Medication Management in Team-Based Care*. <https://www.accp.com/docs/positions/misc/CMM%20Brief.pdf>

hospitalization rates, thereby reducing total health care costs.^{12,13} For example, patients at Minnesota Health Fairview, an integrated health system that contracts with other commercial, managed Medicaid and Medicare payers, saw approximately 20% fewer readmissions in their patients receiving CMM than those who did not.¹⁴ Similarly, HealthPartners, a health plan serving more than 1.8 million members nationwide, saw better outcomes within their diabetes population receiving CMM. Overall, there was a 30% increase in optimal diabetes control, leading to 200 fewer emergency department visits and almost 100 fewer hospitalizations.¹⁵

The pandemic has further underscored the utility of CMM for medically complex patients. COVID-19 patients benefit from CMM's coordinated, synchronous health care team, including input from a pharmacist as the medication expert. Many patients with severe COVID-19 complications have multiple comorbidities that require a team with a medication expert, and they may need additional treatment with antithrombotic, anticoagulant or antiplatelet agents to combat potentially deadly inflammation and thrombosis. Appropriate CMM utilization can help reduce the risk of adverse drug events and costly medication mistakes.

II. Barriers Remain to CMM Uptake

Despite the clear quality and outcomes benefits CMM provides for patients, uptake of CMM is currently impeded by a number of factors. OPM, as the administrator of the FEHB program, has the market influence to push for removal of these barriers. Specifically, the following issues would need to be addressed to increase access to CMM:

A. Define "Medication Management" to Mean CMM

Because CMM follows a proven model and utilizes the entire health care team, it is a far superior approach to ad hoc or carve-out medication interventions. At present, "medication management" is undefined, meaning that numerous less effective and comprehensive interventions could fall under its auspices. To realize the clinical and financial benefits of CMM, pharmacy benefit plans must explicitly define medication management to mean CMM. Health care organizations recently encouraged the Centers for Medicare & Medicaid Services (CMS) to define "medication management" in Medicare Part B to mean CMM. We urge OPM to take a similar track, ensuring that their pharmacy benefit plans clearly define "medication management" to mean CMM, rather than allowing plans to define the term as they see fit. This common language, and a standardized process of care, will allow OPM and other health plan sponsors to measure the impact and value of optimizing medication use through CMM in practice.

B. Encourage Payment Models to Sufficiently Support CMM Services and Recognize Opportunities for Virtual Access

¹² Brummel, A, Carlson, A. Comprehensive Medication Management and Medication Adherence for Chronic Conditions. *Journal of Managed Care Pharmacy* 2016; 22 (1); 56-62.

¹³ Khazraee et al. Clinical pharmacy services like CMM are cost-saving to the health care system, primarily through avoided hospitalization and emergency room (ER) visits. A 2017 study showed a 10:1 ROI when clinical pharmacists worked collaboratively with a multi-disciplinary care management team through targeted engagement with members and providers regarding opportunities to optimize drug regimens.)

¹⁴ Schlichte, A. Medication Optimization Use Case: Minnesota Health Fairview. 2020. <https://16bv1028dn7zhgp35k7rzh5c-wpengine.netdna-ssl.com/wp-content/uploads/2020/11/Medication-Optimization-Use-Case-Minnesota-Health-Fairview-Minneapolis-St.-Paul-Minnesota-11252020.pdf>

¹⁵ Rehrauer, D. Medication Optimization Use Case: HealthPartners. 2020. <https://16bv1028dn7zhgp35k7rzh5c-wpengine.netdna-ssl.com/wp-content/uploads/2020/11/Medication-Optimization-Use-Case-HealthPartners-Bloomington-Minnesota-11252020.pdf>

It is important to note that for the CMM definition to be meaningful, the pharmacy benefit plan must reimburse for these services at a rate sufficient to support these services. It is imperative that the services are coded and reimbursed commensurate with the duration and complexity of the services provided. OPM will be working largely with commercial payors, who have significant flexibility in service contracting, coding and reimbursement, which allow commercial payors to work with the clinical pharmacist and interprofessional team to provide CMM. We believe that as value-based payment models expand, the demonstrable clinical and financial benefits of CMM will contribute to expansion and scaling for broad adoption and access.

Additionally, onsite access to a clinical pharmacist working collaboratively with the team should not be seen as a barrier. To enhance patient access, the services should be made available via telehealth. The Veterans Health Administration, rural providers and increasingly during the pandemic, urban providers, have successfully delivered CMM services virtually. Research indicates that that CMM provided via telehealth has a significant positive influence on clinical outcomes. Studies also noted high patient satisfaction rates, improvement in no-show visit rates compared to face-to-face scheduling and a doubling of return on investment. Given the positive data associated with CMM provided via telehealth, as well as the flexibility it offers insurers, providers and patients, robust pharmacy benefit plans should cover both face-to-face and virtual CMM services.^{16,17}

C. Align and Integrate Optimized Medication Use as an Overall Patient Care and Health Benefit Strategy

Medication use has long been siloed—managed as a “carve-out”—focused on formulary management and discrete activities. The failure to align, coordinate and integrate medication management strategies designed to mitigate medication therapy problems such as unnecessary therapy, incorrect dosages, inadequate therapy, adverse reaction and non-adherence is costing OPM lives and money. In the past, each of these issues might have been treated separately but with limited follow up, coordination or accountability. It remains common for pharmacy benefits to include adherence programs and medication therapy management elements that are not coordinated. However, when CMM is implemented appropriately, this collaborative, pharmacist-led service decreases physician burnout, increases quality and leads to higher patient satisfaction. Rather than taking a piecemeal approach to medication therapy, treatment is aligned, resulting in fewer medication-related problems, better outcomes and lower costs.¹⁸

D. Require Access to Patient’s Clinical Health Information at the Point-of-Care

A robust pharmacy benefits program that includes CMM must also ensure that the CMM team, to include the clinical pharmacist, has access to a patients’ diagnostic results and clinical health records at the point-of-care. Providers must have secure and timely access to the clinical and diagnostic information necessary to identify patients who have not achieved therapeutic goals, identify drug therapy problems and work collaboratively to develop a tailored medication and patient care plan

¹⁶ Singh LG, Accursi M, Korch Black K. Implementation and outcomes of a pharmacist-managed clinical video telehealth anticoagulation clinic. *Am J Health Syst Pharm.* 2015;72(1):70-73. doi:10.2146/ajhp130750

¹⁷ Leach M, Garcia G, Ganzer N. Implementation and evaluation of a pharmacist-run mental health treatment clinic via clinical video telehealth. *Ment Health Clin.* [Internet]. 2016;6(3):159-64. DOI: 10.9740/mhc.2016.05.159.

¹⁸ The Outcomes of Implementing and Integrating Comprehensive Medication Management in Team-Based Care: A Review of the Evidence on Quality, Access and Costs, October 2020 <https://16bvl028dn7zhgp35k7rzh5c-wpengine.netdna-ssl.com/wp-content/uploads/2020/11/The-Outcomes-of-Implementing-and-Integrating-CMM-in-Team-Based-Care-A-Review-of-the-Evidence-on-Quality-Access-and-Costs-11252020.pdf>

with the patient. This includes access to pharmacogenomic test results that contribute to the therapeutic planning. At present, some pharmacy benefits providers are not sufficiently integrated with patients' other clinicians to allow for the requisite EHR access that will permit pharmacist team members to comprehensively manage a patient's medication regimen or evaluate whether clinical goals of therapy have been met.

III. Conclusion

Again, we thank OPM for the opportunity to provide information regarding how medication optimization through CMM can enhance FEHB offerings. Although barriers remain to CMM uptake, we believe the clinical and financial benefits of CMM services will reduce these obstacles over time.

Please do not hesitate to contact Katherine H. Capps, executive director and co-founder of the GTMRx Institute, at kcapps@gtmr.org regarding CMM and/or medication management generally.

On behalf of the GTMRx Institute and the below signatories.

Sincerely,

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GTMRx Representative Sample of Signing Member Companies:

founding funders(+), executive members() and strategic partners(\$)*

Abbvie(\$)	American Academy of Family Physicians (AAFP)	Arine	Baptist Health
Abington Jefferson Health	American Association of Colleges of Pharmacy (AACP)(*)	Arxcel	Baptist Health Louisville
Accenture	American College of Clinical Pharmacy (ACCP)(+)	AscellaHealth	Baptist Medical Center Jacksonville
ActiveRADAR, Inc.	American Society of Health-System Pharmacists (ASHP)(+)	Ascension Medical Group	Baylor University Medical Center
Advanced Primary Care Strategies	Ameshi Management Service Inc.	Ascension Seton	Belmont University College of Pharmacy
Advocacy Options LLC	Amgen(*)	Association of Community Cancer Centers (ACCC)	Benefis Health System
Advocate Medical Group and Midwestern University	Anchor Medical	Atlantic Health System	Beth Israel Lahey Health
AegisOne Rx	Antaeon	Atrium Health	BetterMyMeds
Affinia Health Network	Apexus	Auburn University, Harrison School of Pharmacy	Beverly Hills Institute for Precision Medicine
Albany College of Pharmacy and Health Sciences	APhA	Aurum Diagnostics, LLC	Bingo Dynamic Lifesaver
Aledade	Apple Discount Drugs	Avalon Behavioral Health Solutions, LLC	Biopharma Advisors
All In Solutions	APRx	Avera Health	BJC Medical Group & ACO
Allergy & Asthma Network	Aramark	Avera Heart Hospital	Blue Thorn Inc
Allergy Partners	Arcuris Consulting	Avera Institute for Human Genetics	Board of Pharmacy Specialties
Alliance for Integrated Medication Management	ArdentCare Solutions	Avera McKennan Hospital	Boston Medical Center
		Ballad Health	

Breast Cancer Index(\$)	Care Accountability Inc.	CHC Health	College of Psychiatric and Neurologic Pharmacists
Brigham and Women's Hospital	Caretuit	CHESS Health Solutions	
BRKINS	Carilion Giles Community Hospital	Chicago College of Pharmacy, Midwestern University	Colorado Pharmacists Society
BT Pharmacy Consulting LLC	Catalyst Enterprises LLC	Children's of Alabama	Communication Prescription, LLC
Butler University, College of Pharmacy & Health Sciences	Catholic Health Services of Long Island	Children's Health	Community Health and Wellness Partners
California Chronic Care Coalition(*)	CB Pharmacy Consulting, LLC	Chiro To Go	Community Health Network
California Society of Health System Pharmacists	CCI consulting	CHRISTUS Health	Consana LLC
Carekinesis	CDC via IHRC	CHWP	Consult A Pharmacist, LLC
Campbell's Pharmacy	CDPHP	City Dermatology and Laser	Coriell Life Sciences
Cantu's Pharmacy	Cedars-Sinai	Cleveland Clinic Main Campus	CPESN Iowa
Capacity Strategies	Centene	Clinical and Translational Genome Research Institute of Southern California University of Health Sciences	CPS Telepharmacy
Capita Consulting	Center for Medication Optimization		CrossBridge Health
Capitol Advocacy & Government Affairs, LLC	Center for Quality Medication Management at the University of Florida		CSS Health
Capstone Healthcare Alliance	Chapman University School of Pharmacy	Clinical Pharmacy Systems Inc	CURA Strategies
Cardiomedix		Collaborative Rx Outcomes LLC	Cureatr
Cardiovascular Services		College of Pharmacy, Qatar University	Custom Design Benefits
			CVS
			CXJ Consulting

Dallas-Fort Worth Business Group on Health	Eccrine Systems, Inc eHealth Initiative	Fairleigh Dickinson University School of Pharmacy & Health Sciences	GenXys Health Care Systems GeriatRx
Daviess Community Hospital	Elder Care Pharmacy Consultants, LLC	Fairview Pharmacy Services	Geritom Medical
DCH Health System	Elite Pharmacy Consulting, LLC	FAWKS Company	Ghost Systems, Inc.
Deaconess Hospital	Elon University	Federal Medical Centre, Makurdi	Global Health Care, LLC
Department of Veterans Affairs	Emerging Therapies Solutions	Ferris State University COP	Global Health Strategies
Desert Oasis Healthcare	Emerson Hospital	First Databank	Gold Strike Findings
Diamond S Ranch	Employers' Advanced Cooperative on Healthcare	First Impact	Grand Valley State University, Physician Assistant Studies
Digital Health Space	Ensign Services	Florida Alliance for Healthcare Value	Greater Philadelphia Business Coalition on Health
Doylestown Health	Entree Health	Franciscan Health	Gynecologic Care with Janice Lyon MD SC
Drake University	Envision Genomics	Fresenius Medical Care	Great Plains QIN
DRx Consulting LLC	ePharma PBM do Brasil SA	Frondedge HC	Harding University College of Pharmacy
Duke-Margolis Center for Health Policy	Epic	Gateway Health Plan	Harps Food Stores, Inc.
Duke University Health System	Everyone Matters, Inc.	Geisinger Health System	Health Care Education and Training, Inc.
e.neves Consultoria	Excelicare	GeneIQ	Health Intelligence Partners
East Tennessee State University Academic Health Sciences Center / College of Pharmacy	Executive Kings, Inc.	Genentech(\$)	
Eastern State Hospital	Executive Pharmacy Consulting Services, Inc	Genet-Rx	
		Genome Creative	

Health2 Resources	IDDI	Iowa Healthcare Collaborative	Kevin Marvin Consulting LLC
Healthcare 21 (H21)	i-Health	IPhA-PSMP	LabCorp(*)
Healthcare Quality Strategies Inc.	Illinois Pharmacists Association	IPRO	Laboratory Medicine and Pathology Advisors
HealthPartners Institute	Illuminate Health	Isetts Consulting, LLC	Lantana Pharmacy
HealthTeamWorks	Independent Colleges and Universities Benefits Association, Inc.	ITSAN – International Topical Steroid Awareness Network	Larkin University College of Pharmacy
Hematology-Oncology Associates of CNY (HOA)	Indiana University Health	IU Health	Laurel Senior Living Communities
HG Pharmacist	Indian Health Service	J&J(+)	Lipscomb University College of Pharmacy
HIE of One	Indian Pharmaceutical Association	Jerry H. Hodge School of Pharmacy Texas Tech University Health Sciences Center	Loma Linda University, School of Pharmacy
High Point University	inGENEious RX	JPS Health Network	Lee Health Luminus Diagnostics
Highland Hospital	Innovaccer	Just Better Medicine Pharmacy Solutions	Lehigh Valley Health Network
High Touch Health	InnovaRx	Kailos Genetics, Inc.	Main at Locust Pharmacy and Medical Supplies
Hillside Chronic Care Management	Innovative Healthcare Consulting	Kaiser Permanente(*)	Managed Healthcare Resources, Inc.
Hinsdale Pharmacy Associates, Inc.	Innovatix	Kaiser Permanente Colorado	Manatee Memorial Hospital
Hinshaw & Associates	InsightGx LLC	Kelly Diabetes Associates, LLC	Manchester University
Houston Methodist Health System	Inspera Health	Kennedy Pharmacy Innovation Center, UofSC College of Pharmacy	
HVH Analytics	INTEGRIS Medical Group		
IBM Watson Health	Invitae		
Idaho State University			

Mann-Grandstaff Veterans Affairs Medical Center	MedsPLUS Consulting	Mountain Health CO-OP	Northeastern University School of Pharmacy
Marie Savard, MD	MedTek21 Solutions	MyMeds	Northeast Ohio Medical University
Massachusetts College of Pharmacy and Health Science	MedWatchers	Nasr City Cancer Center	Novant Health
Matheus BD Connections, LLC	Mercer University College of Pharmacy	National Alliance of Healthcare Purchaser Coalitions(\$)	Nurse Advocate
MCG	Mercy Health	National Hemophilia Foundation	NYC Health + Hospitals/ Gotham Health
McQuone Consulting	Mercyone Waterloo Medical Center	National Pharmaceutical Council	OCAPS
MD Resources	Mid-America Coalition on Health Care	Navigant, Inc	Ohio College of Clinical Pharmacy Advocacy Committee
MedAllies	Midwestern University Glendale College of Pharmacy	Nebraska Medicine	Omicare
MedAware	Missouri Pharmacogenomics Consulting	Nevada Business Group on Health	Omnicell
MedCentre PLLC	Mobile MediClaim, Inc.	New Directions Behavioral Health, LLC	On Call Healthcare LLC
Medical Risk Managers	ModRN Health	New Directions Technology Consulting, LLC	OneOme(\$)
Medication Call Reminder	Monument Health, LLC		OnlyYOU®
MedicationXpert, corp.	MorningStar Actuarial Consulting, LLC	NewHealth Collaborative; Summa Health	Options MD
Medigenics Consulting LLC		New Jersey Poison Information and Education Services	Optum Health Services
Medisafe	Mountain Area Health Education Center	Nokomis Fiduciary	Orange Regional Medical Center
MediSync			OYES LLC
Medplus Solutions			Pacific Business Group on Health

Pacific University Oregon School of Pharmacy	PipelineRx	Rexall Pharmacy Group, Inc	Sanford Health
Palm Beach Atlantic University, School of Pharmacy	Pittsburgh Business Group on Health	RHA Health Services	Santiam Hospital
Panacea BioMatx, Inc	Point-of-Care Partners	Ritu Suri MD LLC	Santosha Health
Park Nicollet Health Services	Prefeitura Municipal de Belo Horizonte	Riverside University Health System	Sarasota Memorial Hospital
Parker Adventist Hospital	Preventive Plus	RiverStone Health	ScalaMed
Partners Pharmacy	Prisma Health	Rochester Regional Health	SCAN Health Plan
Penn Presbyterian Medical Center	Proactive Health, Atrium	Rocky Mountain Health Plans	Scipher Medicine
Perfect Planet, LLC.	Psychopharm Solutions LLC	Roosevelt University	Scripta Insights
Pharma-Care, Inc.	PTS Diagnostics	Rosalind Franklin University	Signature Diabetes Institute (SDI)
Pharmaceutical Care Options, LLC	QRxConsults LLC	Roseman University	Simplicity Pharmacy Services and Wellness Center Inc
PharmaLead Consulting	Quality Community Health Care	RPRD Diagnostics	Siouxland Community Health Center
Pharmazam, LLC	Quest Diagnostics(+)	Rutgers Pharmacy & Henry J. Austin Health Center	SOHO Health
PharmD Live	QuickSTAT	rx-Consultant,LLC	South College School of Pharmacy
PharmEcology Services, WMSS	Reed Family Pharmacy	RxResults	South Dakota State University
PharMerica	Reengineering Cancer Treatm	Saba and Associates, LLC	Southwest General
Physician Health Partners	Regenstrief Center for Healthcare Engineering	Salt Lake City Medical Center	Southwest Montana Community Health Center
PIH Health Hospital – Downey	Retirement Wellness Strategies	San Antonio Regional Hospital	Spartanburg Regional Healthcare System

St. Bernards Hospital, Inc.	Medicine, A&M Rural and Community Health Institute	TMAccelerator	University of Chicago Medicine
St. Christopher's Hospital for Children	Texas Business Group on Health	Towncrest Pharmacy	University of Cincinnati College of Pharmacy
St. Johns University, Long Island University	Texas Tech University Health Sciences Center	Trinity Clinical Pharmacy Services	University of Colorado
St. Louis College of Pharmacy	Jerry H. Hodge School of Pharmacy	TriStar Summit Medical Center	University of Connecticut School of Pharmacy
St. Luke's Rehabilitation Institute	TFG Partners, LLC	TrustCare Health	University of Florida College of Pharmacy
St. Mary Medical Center	The California Chronic Care Coalition (CCCC)	TS Consulting Services	University of Georgia College of Pharmacy
Steward Healthcare	The FIT PharmD	Umm Al-Qura University	University of Hawaii at Hilo; Hawaii Island Family Health Center
Stroke Association Support Network – Ghana	The John Hopkins Hospital	UNC Eshelman School of Pharmacy, Center for Medication Optimization	University of Illinois at Chicago College of Pharmacy
SyneRxgy Consulting, LLC	The Johns Hopkins Health System	UnitedHealthcare	University of Iowa Hospitals & Clinics
Tabula Rasa Health Care(*)	The Journal of Precision Medicine	Universidade Federal de Minas Gerais	University of Jordan Hospital
Teachers' Retirement System of Kentucky(\$)	The Kimber Boothe Group, LLC	University at Buffalo	University of Kansas
TeleMedik	The Sab Group	University of California Irvine	University of Kentucky
Texas A&M Rural and Community Health Institute	The Virtual Nephrologist, INC.	University of California San Diego	University of Maryland
Texas A&M University HSC College of	Therapy in your home – OT PT ST	University of California San Francisco	
	Thermo Fisher Scientific		
	TLJ Health		

University of Maryland Quality Care Network	University of Texas Rio Grande Valley	Vulcan Enterprises LLC	College of Pharmacy
University of Medicine Mandalay	University of Utah College of Pharmacy	Walgreens	WeWa.life LLC
University of Minnesota	University of Tennessee Health Science Center College of Pharmacy	Walmart	Wilkes University
University of Mississippi School of Pharmacy	UPMC Western Maryland	WardRx Consulting	William Carey University School of Pharmacy
University of Missouri Kansas City School of Pharmacy	University School of Pharmacy	Washington State University College of Pharmacy & Pharmaceutical Sciences	William Jones RPh, LLC
University of Nevada School of Medicine	Uptown Pharmacy	Watermark Counseling LLC	Williamsburg Endocrinology, Inc
University of New Mexico College of Pharmacy	USAID	Watson International Consulting LLC	WilsonValue Drug Store
University of North Texas Health Science Center	UTHealth McGovern Medical School	Wayne State University College of Pharmacy	Wolfe's Pharmacy
University of Rochester Medical Center	VA Medical Center	Webster & Associates, LLC	Wolters Kluwer Health
University of South Australia	Vanderbilt University Medical Center	WellScriptEd Consulting Inc.	W Triplet Consulting LLC
University of South Carolina	Vigilance Health Inc.	WellWaze, Inc.	Xavier University of Louisiana College of Pharmacy
University of Texas at Austin College of Pharmacy, Pharmacotherapy Division	Vintage Consulting	Wentworth-Douglass Hospital	Xeris Pharmaceuticals
	Virginia Commonwealth University	Wesley Healthcare Systems	YouScript
	Visante, Inc	West Coast University	Zigna Analytics
	Vizient	Western University of Health Sciences,	Züp Medical Services

Appendix A: The Patient Care Process for Delivering Comprehensive Medication Management (CMM)
Optimizing Medication Use in Patient-Centered, Team-Based Care Settings
https://gtmr.org/wp-content/uploads/2019/06/CMM_Care_Process.pdf



Appendix B: Employer Toolkit

The image shows the cover of a report. At the top, there is a photograph of a healthcare professional in a white coat. Below the photo is a blue banner with the title 'Comprehensive Medication Management in Benefits Design: A Toolkit for Employers'. The main body of the cover is white with blue text. It includes sections for 'Concerned about medication misuse, underuse or overuse in your pharmacy and medical program?', 'About the GTMR Institute', and a pie chart showing 'Non-optimized medication use costs \$28.6 billion in waste attributed to: Long-Term Care Admissions, Hospitalizations, Emergency Department Visits, Provider Visits, and Additional Prescriptions'. At the bottom right, there is a small logo for GTMR.

Concerned about medication misuse, underuse or overuse in your pharmacy and medical program?

Everyone is different, not every medication is right for every person. **Comprehensive medication management (CMM)** is a well-established process of care that ensures that every medication an individual takes is appropriate and effective for them.

CMM is different from medication therapy management (MTM), a broad term that has, over the years, come to include all sorts of activities related to pharmacy benefit management (PBM). MTM activities are not clearly defined or implemented in a standard way by PBMs and health plans. Employers should be wary of programs that offer only single service activities (e.g. adherence, medication reconciliation, comprehensive medication review) such as those found in Medicare Part D prescription drug plans; this is not CMM. CMM is a well-defined process to optimize medication use that has delivered consistent results. This 10-step process of care is delivered in collaborative practice with a physician by a qualified member of the health care team (usually a clinical pharmacist) and designed specifically to ensure that all medications are optimized for that patient. It may also include tools such as pharmacogenomics (PGx) leading to target correct therapies. CMM is a patient-focused process versus a medication-focused activity.

This toolkit explores the benefits of CMM for individuals and for the employers who pay for benefits. Research published in March 2018 reveals the waste to the system when the wrong drugs are prescribed, drugs are skipped or make people sicker, cause an estimated 27,000 deaths per year.¹ In financial terms, there's also a \$2.29 billion price tag attributed to non-optimized medication use.

Non-optimized medication use costs \$28.6 billion in waste attributed to:

- Long-Term Care Admissions: \$11.6 billion
- Hospitalizations: \$7.2 billion
- Emergency Department Visits: \$3.2 billion
- Provider Visits: \$2.8 billion
- Additional Prescriptions: \$3.8 billion

Decreasing waste, improving quality and ensuring appropriate use of medications through health benefit design is a high priority for employers. As you plan your health benefit strategy (for pharmacy and medical), and as you seek to contract for programs that optimize medication use and manage medication therapy problems, use this toolkit to work with your

1. Hershkovits, et al. Use of Prescription Drug-Related Severity and Severity Scores. JAMA Network Plus. 2018; 3(4):e000001. doi:10.1093/jnnp/0000001.0000001.0000001

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