

Prescription Drug Adherence in Medicaid Managed Care October 2014



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I. Introduction

Prescription drugs regimens are increasingly important in health care treatment. A recent Center for Disease Control report concluded, "Over the last 10 years, the percentage of Americans who used at least one prescription drug in the past month increased from 44% to 48%. The use of two or more drugs increased from 25% to 31%. The use of five or more drugs increased from 6% to 11%."

The effectiveness of prescription drug treatment is largely dependent on the degree to which the medications are taken as prescribed, an area broadly referred to as medication adherence. Significant medication adherence challenges exist. The findings of a report by the Mayo Foundation for Medical Education and Research are summarized in the text box below.²

Although these medications are effective in combating disease, their full benefits are often not realized because approximately 50% of patients do not take their medications as prescribed. Factors contributing to poor medication adherence are myriad and include those that are related to patients (e.g., suboptimal health literacy and lack of involvement in the treatment decision-making process), those that are related to physicians (e.g., prescription of complex drug regimens, communication barriers, ineffective communication of information about adverse effects, and provision of care by multiple physicians), and those that are related to health care systems (e.g., office visit time limitations, limited access to care, and lack of health

The economic cost of medication non-adherence is significant --it has been estimated at more than \$100 billion annually, which includes avoidable hospitalizations, nursing home admissions, and premature deaths.³ Extensive research has been conducted to quantify

¹ "Prescription Drug Use Continues to Increase: U.S. Prescription Drug Data for 2007-2008," Qiuping Gu, M.D., Ph.D.; Charles F. Dillon, M.D., Ph.D.; and Vicki L. Burt, Sc.M., R.N., NCHF Data Brief #42, Center for Disease Control and Prevention, September 2010. http://www.cdc.gov/nchs/data/databriefs/db42.html

² "Medication Adherence: WHO Cares?," Marie T. Brown, MD; and Jennifer K. Bussell, MD, Mayo Foundation for Medical Education and Research, 2011. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068890/

³ "Adherence to Medication," Lars Osterberg and Terrence Blaschke, New England Journal of Medicine, August 2005, and "Variation in Patients' Adherence to Medical Recommendations: A Quantitative Review of 50 Years of Research," M.R. Dematteo, Medical Care, March 2004.

the benefits of medication adherence, much of which has been synthesized in a report prepared by the Pharmaceutical Research and Manufacturers Association (PhRMA).⁴

Our report's focus is on the Medicaid prescriptions paid for directly by State Medicaid agencies and Medicaid managed care organizations (MCOs). Note that prescriptions for persons dually eligible for Medicaid and Medicare, which represent approximately half of the prescriptions that the overall Medicaid population receives, are predominantly paid for by Medicare Part D plans and are not the focus of this report.

Achieving medication adherence in the Medicaid arena is particularly important – and challenging – due to the following dynamics:

- Low-income subgroups disproportionately have educational, cultural, and transportation barriers to accessing care and adhering to prescribed care.
- Family support systems are important in facilitating medication adherence, but Medicaid subgroups relatively often have fractured and/or unstable family dynamics that hinder adherence.
- Medicaid populations frequently do not have a strong and lasting connection with one or more physicians. Physicians familiar with their patients' clinical needs and non-clinical strengths and limitations are valuable in initiating appropriate medication regimens and supporting adherence.
- Poverty inhibits effective communications that can support adherence due to
 housing instability, phone number instability, language barriers, and lower rates of
 adoption of communication technologies such as email. However, it is important to
 note that the use of cell phones, text messaging, wireless internet, etc. among

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⁴ "Improving Prescription Medicine Adherence is Key to Better Health Care," PhRMA, January 2011. ://www.phrma.org/sites/default/files/pdf/PhRMA_Improving%20Medication%20Adherence_Issue%20Brief.pdf

Medicaid populations has grown rapidly. The Census Bureau estimates that 81% of the poverty population used a cell phone as of 2011, for example.⁵

- Currently 43 states, including the District of Columbia, impose co-pays. These Medicaid copays may vary by drug type, single source drugs, or eligibility group.⁶ Medicaid copayments, while quite small relative to copayments in other coverage programs, can serve as a meaningful barrier to filling/refilling medications. Poverty also reduces the affordability of even the relatively low-cost products that can support adherence, such as colored pill boxes, devices that split pills, etc.
 - The volatility of Medicaid eligibility in many coverage groups leads states to limit prescription drug coverage to a 30 day supply, so that the Medicaid program avoids paying for medications beyond the timeframe that Medicaid coverage is in effect. These policies make it more likely that Medicaid beneficiaries will run out of their longer-term medications before they obtain a refill. In some states, there are limitations on the number of medication refills an individual can be prescribed at one time, which are generally used to treat chronic conditions. For example, in Rhode Island, there is a maximum of five refills allowed for individuals with chronic conditions. Further, the pharmacist is responsible for not refilling any additional prescriptions when it is apparent that the patient is failing to follow the medication regimen at least 75% of the time.⁷
 - The above factors all make it more difficult for refills to occur in the Medicaid arena.

State Medicaid agencies, Medicaid managed care organizations (MCOs), pharmacies, drug manufacturers, physicians, and policymakers all share a motivation to minimize the above barriers and to facilitate access to and adherence to clinically appropriate medication regimens. Extensive efforts have occurred to improve adherence, both for all populations and specific initiatives targeted to Medicaid subgroups.

⁵ "Extended Measures of Well-being: Living Conditions in the United States, 2011," Julie Siebens, United States Census Bureau, September 2013. http://www.census.gov/prod/2013pubs/p70-136.pdf

⁶ "State Health Facts," Kaiser Family Foundation. A table showing Medicaid prescription drug copayments, state by state, is available at the following website: http://kff.org/medicaid/state-indicator/prescription-drugs/

⁷ "Pharmacy Coverage Policy," Executive Office of Health & Human Services for the State of Rhode Island. http://www.eohhs.ri.gov/ProvidersPartners/ProviderManualsGuidelines/MedicaidProviderManual/Pharmacy/PharmacyCoveragePolicy.aspx

The remainder of the report divides the adherence initiatives into two major groups:

- Medicaid MCO Initiatives to Promote Medication Adherence
- Pharmacy Adherence Initiatives

II. Medicaid MCO Initiatives to Promote Medication Adherence

Medicaid MCOs have collectively implemented a wide range of actions to identify and address prescription drug adherence issues among their enrollee populations. This section describes several of the programs that one or more MCOs have adopted. The section is categorized into the following areas:

- Case Examples
- Data Analytics
- Communications with Physicians and Pharmacies
- Medication Therapy Management
- Creative and Individualized Problem-Solving
- Quality Measurement and Reporting Related to Prescription Drug Adherence
- Assessing the Effectiveness of the Adherence Supports Being Used
- Education Campaigns
- Eliminating Out-of-Pocket Costs

MCO activities include a wide array of broad-based education and supports that foster ongoing adherence and also include various enrollee-specific efforts to identify and address situations where optimal adherence is not occurring.

A. Case Examples of Specific Medicaid MCO Adherence Programs

CareSource Medication Therapy Management (MTM): CareSource, Ohio's largest Medicaid MCO, initiated a MTM program in July 2012 that reimburses pharmacists to monitor CareSource member medication routines. The premise for this initiative was that pharmacists operate on the "front line" with CareSource members and routinely provide

information on prescriptions. CareSource sought to leverage this opportunity to thoroughly integrate medication adherence into the care a member is receiving.

CareSource utilizes enrollment and pharmacy claims to notify a pharmacist of a member's non-adherence through a web-based tool. Once a member is enrolled into the MTM program, a member is eligible for a medication review by a pharmacist to analyze their complete medication list and review any unnecessary or conflictive drugs. Within the scope of the program, a member may also receive targeted interventions, including patient education, medication compliance, and increased prescriber contact.

To create awareness about the MTM program, CareSource formed a partnership with the Council of Colleges of Pharmacy and the Ohio Pharmacists Association (OPA). The OPA orchestrated the necessary training from MTM for interested pharmacists to become certified as MTM Personal Pharmacists. More than 500 pharmacists have been trained through this partnership.

The program was evaluated through March 2013 and has shown favorable results. Roughly 33,000 members (4% of CareSource's overall enrollee population) are participating in the MTM program. Across a nine-month period, more than 50,000 MTM claims for pharmacist counseling were processed through approximately 1,250 participating pharmacies. Of the total claims, 38% were initiated by the trained pharmacists who noticed a discrepancy in member medication; the other 62% were a result of the Outcomes web-based tool. Anecdotally, some CareSource members are now requesting an MTM consultation when they enter their pharmacy.

CareSource has realized a cost savings of more than \$1.5 million and an ROI of 1.3:1. Additionally, the MTM services have kept members from unnecessary ER and doctor visits showing an estimated medical cost avoidance of approximately \$9 million and an ROI of 8:1.

Gateway Health Plan: Gateway serves Medicaid beneficiaries in Pennsylvania. Recognizing that there are many factors that contribute to medication noncompliance, Gateway designed a Special Needs Unit around helping members achieve adherence. The Special

Needs Unit provides education and support, connections with community resources, and telephonic support.⁸

Gateway has also introduced condition-specific initiatives to support adherence. For example, Gateway implemented a disease management program, "AIR," that produces a medication profile and identifies members with asthma who have filled their prescriptions for inhalers less than three times within a six month period. The report is mailed to physicians and identified members.⁹

Passport Health Plan: Passport, Kentucky's longest-standing Medicaid MCO, has implemented a Late Refill Program to directly support persons with apparent adherence challenges. Enrollees who are more than six days late filling a chronic maintenance medication are identified in the health plan's reporting system. Passport conducts refill reminder calls to these members, directly transferring them to their pharmacy. During these calls, Passport also asks why the prescription was not refilled (not needed, forgot, etc.) in order to identify whether ongoing support (and of what type) seems warranted to assist this enrollee over the longer-term.

Neighborhood Health Plan—Antidepressant Medication Management:

Neighborhood is a Medicaid MCO in Massachusetts that has partnered with Beacon Health Strategies to implement an Antidepressant Medication Management Member Outreach Program. This program utilizes health coaches who conduct telephonic outreach to members who have recently been prescribed antidepressants, providing focused education on the importance of medication adherence. ¹⁰

⁸ "Gateway Health Plan Says Thank You and Farewell To Its Chief Medical Officer," Peter J. Keim, Clinical Times Physician Newsletter, July 2007. http://gatewayhealthplan.com/newsletters/images/1000001177CT%207-07%20PDF.pdf

⁹ "Helping Patients Comply with Long-Term Asthma Control," Edwin Kairis, MD, Medical Director; and Chris Ann Uhler, RN, BSN; Clinical Times Physician Newsletter, July 2007.

http://gatewayhealthplan.com/newsletters/images/1000001177CT%207-07%20PDF.pdf

¹⁰ "New Outreach Program for Antidepressant Adherence," Clinician Quarterly, Summer 2013. https://www.nhp.org/provider/newsletters/CQ_summer_2013.pdf

Neighborhood Health Plan—Asthma Disease Management Program:

With a large enrollee subgroup diagnosed with asthma, Neighborhood Health Plan developed an Asthma Disease Management Program. Data analyses of medical and pharmacy claims are conducted to identify patients eligible for the program. Each quarter, Neighborhood produces a report of members utilizing asthma services and sends a summary to primary care physicians (PCPs). PCPs are able to review their patients' utilization trends and address them with their patients—whether through education or case management. Additionally, Neighborhood sends a "Trigger Report'" to physicians when members have failed to fill an asthma controller drug prescription. Within a five-year period, there was a 9% increase in asthma patients adhering to their prescribed controller medication.¹¹

B. Data Analytics to Identify Adherence Gaps

Medicaid health plans and their pharmacy benefits management (PBM) subcontractors have become increasingly sophisticated and progressive in working with pharmacy claims data to identify potential gaps in enrollee adherence. One advantage of pharmacy data analytics is that transactions are largely processed in "real time," meaning the claims information is often available immediately at the point the prescription is filled. Conversely, with physician and hospital services, it can take several weeks for the provider to submit the claims information to the MCO, and additional time is needed for the MCO to process the claim.

A major adherence challenge in Medicaid is ensuring that needed refills are accessed. One way that many MCOs and PBMs leverage the transaction speed of pharmacy claims involves promptly identifying situations where a refill was not filled or picked up, seeking to assess whether a problem in fact exists and, where appropriate, helping to reinstate the medication regimen.

While the specific mechanisms used vary across MCOs, there are often triggers built in to their information systems to flag maintenance medications that are not refilled. Alerts go to case management staff and/or the physician to let them know that the member's

¹¹ "A Compendium of Managed Care Innovations," Emily Egan and ShaNez Hendrick, Medicare and Medicaid Best Practices. http://americanactionforum.org/uploads/files/research/Compendium2.pdf

prescription has not been refilled. The current MCO outreach that most frequently occurs is usually telephonic, but the use of email and text messaging to alert enrollees/caregivers, physician office staff, and/or pharmacy staff to an adherence gap is growing rapidly.

Adherence-related data analytics are not limited to identifying and addressing refill gaps. While claims analyses cannot, with certainty, demonstrate whether any given medication is actually being taken as prescribed, many clues can be obtained regarding the degree to which an individual is properly taking the medication. The following areas can all be indicators of sub-optimal medication adherence:

- Laboratory test results. Increasingly, Medicaid MCOs are capturing not just the
 traditional claim showing which lab tests were conducted, but they are electronically
 capturing the *results* of each test. Results outside of normal boundaries and/or
 results moving in the wrong direction despite the introduction of a medication
 regimen suggest that an adherence problem may exist.
- Emergency department (ED) visits. Visits to the ED can often be indicative of an adherence challenge. For example, ED visits due to an asthma flare-up are often associated with sub-optimal adherence to the enrollee's asthma medications.
- Hospitalizations. Hospitalized members---especially those repeatedly hospitalized within a given year often are signaling that something needs to change with their medication regimen and/or their adherence. Many MCOs strive to take advantage of the "captive audience" aspect of inpatient care to provide education about better self-management of the condition that caused the hospitalization, which often includes medication adherence. This also helps support post-discharge care coordination efforts to help keep the enrollee stable and break the pattern of repeated clinical crises and hospitalizations.
- Pregnancies. A woman who becomes pregnant despite having recently filling a birth control prescription may warrant adherence support from the MCO if she intends to avoid future pregnancies.

MCOs and their PBM contractors also conduct analytic modeling to ensure that adherence efforts selectively focus only on the most cost-effective and clinically effective therapeutic

options. Medicaid MCOs also often work to identify potential abuse or misuse of medications (e.g., controlled substance painkillers) and prevent the associated negative health outcomes associated with potentially addictive prescription drugs.

In addition to the extensive work that Medicaid MCOs and their contracted PBMs directly conduct to support prescription drug adherence, some MCOs also contract with specialty firms to provide medication adherence support to enrollees. These firms center their approach on analytic algorithms to identify persons who are most likely to be favorably impacted by various adherence support approaches. Two examples of these organizations are Agadia and RxAnte.

C. Communications with Physicians and Pharmacists

The Medicaid MCO analytic efforts described above support communication initiatives with physicians, pharmacists, and enrollees to directly address identified adherence concerns, as well as gaps in indicated care that can inhibit medication adherence. An example of this is presented in Exhibit 1, which is a standard report that AmeriHealth Mercy's Pennsylvania health plan shares with its primary care physicians when a potential care gap is identified.¹²

In many instances, a treating physician may observe a potential medication adherence problem. In an optimally integrated situation, this physician will directly provide adherence education and will also help the enrollee access available adherence supports through the MCO and the pharmacy.

Regardless of which person or organization identifies the adherence challenge, which can include the member herself/himself, it is important that all appropriate avenues of support be available and explored. This support will typically require collaboration across several, if not all, of the following parties:

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¹² "AmeriHealth PA Medicaid Plans Care Gap Worksheet." http://www.amerihealthnortheast.com/pdf/provider/initiatives/let-us-know/care-gap-worksheet.pdf

- MCO care coordination and outreach staff
- Prescribing physician(s) and related office staff
- Pharmacist and pharmacy technicians
- The enrollee and key family members/caregivers

Exhibit 1. Sample Medicaid MCO "Care Gap" Report – AmeriHealth Mercy¹²

AmeriHea	lth PA Medicaid	Plans				Clinical Infor	
	Worksheet	· idiis		m		record for review by :	
Member:					PCP Assign	ned:	
Name: ID #:	Jane Doe 543322123				Name: Address:	DR Joe Smith 123 Anywhere	St
Age/DOB: SSN (Last 4):	45 9/2/66 4529					Lancaster, PA 1	7601
Phone:	717 215 1122				Phone:	717 554 4435	
Claims P	rocessed through e	end of month (May 2012				
	e(s) - Due Soon/Ov		•		d		
Alert Servic		ei Due/iviissii	ig – Kespoii	se nequire	"		Date
Condition	Service Last Due Service	Last Value	Status	Frequency	Date Done	Result	Date Referred
Critical Quality Incentive	Diabetes- LDL 5/10/10	122	Overdue	At least once a year			
At Risk/Risk	Service(s) – Inform	national Only					
Condition	Service Due	Status	Frequency				
Preventive Health Screen	Annual Dental Visit 5 2-21 years	Risk At	least once a y	ear			
Up-to-Date	Service(s) – Inform	national Only					
Condition	Service Due	Status	Frequency				
	Cervical	Ar Jp To Date	t least once ev years	ery 3			
Preventive	s Cancer Screen				Let our stat	f know what sp	ecific
Preventive Health Screen							can
Health Screen	<mark>ke help outreaching</mark>	to this membe	r?			treach help we for this membe	
Health Screen Would you li	ke help outreaching se help with the follo		<mark>r?</mark> ⊭	/		treach help we for this membe	
Would you li Yes, pleas	se help with the follo	Wing:	im (QEP). To upda		provide	for this member	er
Would you li Yes, pleas	e help with the follo	Wing:	im (QEP). To upda		provide	for this member	er Honse Fax completed
Would you li Yes, pleas	e help with the follo s may be part of the Quality above. Sign below and fax :	Wing:Enhancement Progra a copy of the updated	im (QEP). To upda	5-755-3186.	provide	for this member	er

The degree to which -- and the ways in which – communication occurs among these parties plays a key role in the effectiveness of any adherence program. One broad-based form of communication between MCOs and physician staff occurs through physician newsletters. These letters often include information on medication adherence, as shown in the example in Exhibit 2 taken from a Gateway Health Plan newsletter.

It is also important to note that neither the MCOs, the pharmacies, nor the prescribing physicians operate with unlimited resources to support medication adherence. While there is no limit to the quantity of adherence support that any party might provide, these adherence supports need to fit in with the full body of daily activities that MCOs, pharmacies, and physicians conduct – and do so in a cost-effective manner. For these reasons, low-cost technologies such as emails and text messages are increasingly used to share adherence-related information among the involved organizations and individuals.

However, as the party facing the full financial cost of poor clinical outcomes related to low medication adherence, MCOs are also cognizant of the need to avoid under-investing in adherence supports. For example, MCOs are likely able to deploy a cadre of low-cost outreach staff who can call, email, or text message enrollees to inquire about medication regimens. Often, the MCO's clinical staff will have alerts built into their case management systems to discuss medication adherence with members.

When working telephonically, many MCOs immediately connect the member to the physicians' office and/or pharmacy when the opportunity to correct the problem exists. Medicaid MCOs are also often well positioned to ensure that transportation challenges to the provider and/or pharmacy can be overcome, given that non-emergency transportation is typically a Medicaid-covered service.

Communications about Medicaid beneficiaries with physicians are not necessarily limited to MCO activity, particularly in pharmacy carve-outs or fee-for-service programs. For example, West Virginia's Medicaid agency operates a Drug Utilization Review (DUR) program that contacts prescribing physicians to promote adherence to maintenance medications for persons covered through the Medicaid fee-for-service program.

Exhibit 2. Gateway Health Plan's CLINICAL TIMES PHYSICIAN NEWSLETTER, Excerpted from July 2007 Edition

Special Needs Unit & Pharmacy – Helping Patients Follow Their Treatment Plans

According to the Office of the U.S. Inspector General, "Noncompliance with drug treatment accounts for 125,000 deaths per year. Ten percent of hospital admissions and up to 23 percent of nursing home admissions each year could be avoided if people took their medications as prescribed. Neither gender, age, ethnicity, or educational level seem to be an indicator of compliance." Studies have shown that only 50 percent of patients take their medications as prescribed.

Why are patients not taking medications?

Reasons for noncompliance are varied and include:

- Inconvenience
- Not understanding the directions
- Fear of possible side effects
- The taste of the medications and altered taste perceptions of other foods
- Cost
- Personal and emotional (psychological) reasons, such as denial of an illness or an attempt to gain control

Who doesn't take their meds?

Compliance is an issue for all age groups. Seniors have multiple compliance issues, including numerous medications ordered by different doctors, the use of nonprescription drugs, increased sensitivity to medications, and cognitive changes. Middle-aged adults are at greatest risk for missing medications due to their busy lifestyles. Children are less likely to follow a treatment plan, especially when they have a chronic diagnosis that requires complex therapy, such as asthma or juvenile diabetes. Adolescents can refuse treatment out of rebellion toward parents or authoritative medical personnel.

How do we get cooperation?

Because there is no single cause of noncompliance, preventing it can be challenging. Here are some recommendations for encouraging patients to cooperate:

- Encourage routines, e.g., use of medications that are associated with certain events or a time of day.
- Provide printed instructions that are simple and easy to follow. Most medication instructions are at the eighth-grade reading level, which only 58% of the population can easily read.
- Recommend devices such as pill boxes.
- Foster two-way communication with patients with clear explanations and the rationale for treatment.
- Encourage support groups or a family member or "buddy" to assist in reinforcing the treatment plan.

How can GHP help?

Gateway is interested in partnering with your office to meet the many challenges of medication and treatment compliance. At Gateway we have a number of resources available to provide assistance to your office regarding adherence to treatment plans, including medication compliance. Gateway's Special Needs Unit is designed to help members who may need guidance in following their medication regime or treatment plan. This group can also connect members with supportive community resources.

D. Creative Individualized Problem-Solving

Beyond the computer algorithms to identify adherence challenges and opportunities and structured outreach activities that many Medicaid MCOs conduct, there is clearly value in personalized problem identification and problem-solving efforts. The example below highlights this.

In Pennsylvania, an AmeriHealth member was identified as repeatedly appearing at the hospital emergency department with asthma attacks. Through case management, the health plan determined that the child was not regularly using his inhaler when needed, as he was often not keeping the inhaler with him when he moved between his mother's home, his father's home, and his school. AmeriHealth addressed this challenge by authorizing payment

E. Quality Measurement and Reporting Related to Prescription Drug Adherence

In the Medicaid MCO setting, substantial quality measurement and quality data reporting occurs. Increasingly, State Medicaid agencies are requiring that Medicaid health plans obtain quality accreditation – typically from the National Committee for Quality Assurance (NCQA). In addition, states are incorporating significant quality-related incentives into their contracts with Medicaid health plans, motivating quality achievement beyond the accreditation requirements.

The MCO industry's standard quality measurements – known as HEDIS measures – have included prescription drug adherence measures for many years. The incorporation of additional HEDIS medication adherence measures has grown rapidly in recent years. Exhibit 2 conveys 13 medication adherence-related HEDIS measures that NCQA-accredited Medicaid MCOs have reported during 2013. Note that the data shown in this and the ensuing HEDIS tables reflect a two-year gap between the "measurement year" and the "reporting year." The CY2013 figures in the table therefore represent operational

performance during CY2011. Exhibit 3 also presents the average score on each measure across all Medicaid MCOs.¹³

Two additional medication adherence-related Medicaid quality measures have been added for 2013:

- Monitoring for People With Cardiovascular Disease and Schizophrenia
- Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Exhibit 3. Average Medicaid HMO Scores and Trends, 2011-2013, HEDIS Measures Related to Prescription Drug Adherence

MEASURE	2011	2012	2013
Medication Management for People With Asthma: Medication Compliance 75% (12-18)			25.4
Medication Management for People With Asthma: Medication Compliance 75% (19-50)			33.9
Medication Management for People With Asthma: Medication Compliance 75% (5-11)			25.7
Medication Management for People With Asthma: Medication Compliance 75% (51-64)			50.1
Medication Management for People With Asthma: Medication Compliance 75% (Total)			28.8
Persistence of Beta-Blocker Treatment after a Heart Attack	77.4	81.0	82.7
Pharmacotherapy Management of COPD Exacerbation - Bronchodilator	82.1	80.4	81.1
Pharmacotherapy Management of COPD Exacerbation - Systemic Corticosteroid	65.1	64.1	65.6
Use of Appropriate Medications for People with Asthma - Total		85.4	83.8
Use of Appropriate Medications for People with Asthma (12-18)		86.6	85.8
Use of Appropriate Medications for People with Asthma (19-50)		74.6	73.9
Use of Appropriate Medications for People with Asthma (5-11)		91.1	89.7
Use of Appropriate Medications for People with Asthma (51-64)		71.5	70.6

The measures listed in Exhibit 3 show that most of the prescription drug adherence measures have been introduced in 2012 or 2013. For the three adherence measures introduced prior to CY2012, Exhibit 4 tabulates the progression in the Medicaid MCO industry's average scores from 2011-2013. Detailed definitions of the HEDIS criteria for these three measures are provided in the text box below.

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¹³ Averages reported using the NCQA Quality Compass data are straight averages across all reporting Medicaid MCOs (as opposed to an enrollment-weighted mean).

SAMPLE DEFINITIONS OF HEDIS MEASURES

Persistence of Beta-Blocker Treatment after a Heart Attack: This HEDIS measure is the percentage of members 18 years of age and older who were discharged from the hospital after surviving a heart attack and who received persistent beta-blocker treatment.

Pharmacotherapy Management of COPD Exacerbation – Bronchodilator: This HEDIS measure is the percentage of COPD exacerbations for members 40 years of age and older who had an acute inpatient discharge or ED encounter between January 1-November 30 of the measurement year and who were dispensed a bronchodilator medication within 30 days of the event.

Pharmacotherapy Management of COPD Exacerbation - Systemic Corticosteroid: This HEDIS measure is the percentage of COPD exacerbations for members 40 years of age and older who had an acute inpatient discharge or ED encounter between January 1-November 30 of the measurement year and who were dispensed a systemic corticosteroid medication within 14 days of the event.

Exhibit 4. Average Scores and Trends Among HMOs Reporting Data Each Year from 2011-2013, HEDIS Measures Related to Prescription Drug Adherence

		Pharmacotherapy	Pharmacotherapy
	Persistence of Beta-	Management of COPD	Management of COPD
	Blocker Treatment	Exacerbation -	Exacerbation - Systemic
	After a Heart Attack	Bronchodilator	Corticosteroid
Average Score 2011	76.9%	81.8%	64.9%
Average Score 2013	83.9%	81.9%	66.0%
Average Percentage Point Improvement, 2011-2013	7.0%	0.0%	1.1%
Number of Plans With Lower Score in 2013 than 2011	4	29	27
Number of Plans of Improving Score from 2011-2013	28	28	31
Number of Plans Reporting All Three Years	32	57	58
Percentage of Plans Improving Score from 2011-2013	88%	49%	53%

Figures differ from corresponding averages in prior exhibit because this table includes only HMOs reporting every year from 2011-2013.

Probably the most important attribute of these HEDIS statistics, irrespective of what the numbers and recent trends currently are, is that prescription drug adherence is being measured, publicly reported, and incentivized in the Medicaid MCO setting. In this environment, the MCOs are strongly motivated to take action to strengthen their performance in the many adherence areas being measured.

Exhibit 5 presents the top three ranked Medicaid MCOs nationally on three selected prescription drug adherence measures in 2013, and Exhibit 6 presents the top three Medicaid MCOs nationally with regard to the percentage point improvement that the health plan has achieved on a given prescription drug adherence measure from 2011-2013. Note that one of NCQA's requirements for reporting HEDIS measures is that the process used by an MCO (and the scores derived) be audited and verified by a qualified external organization.

Exhibit 5. Highest Scoring Medicaid Health Plans, 2013 – Selected HEDIS Measures Related to Prescription Drug Adherence

HEDIS MEASURE: Persistence of Beta-Blocker Therapy After a Heart Attack

HEALTH PLAN NAME (STATE)	2013 Score
1. Neighborhood Health Plan (Massachusetts)	95.45
2. Gateway Health Plan (Pennsylvania)	93.42
3. Health Net (California)	91.91

HEDIS MEASURE: Pharmacotherapy Management of COPD Exacerbation – Bronchodilator

HEALTH PLAN NAME (STATE)	2013 Score
	30016
1. CoventryCares (Michigan)	93.53
2. Coventry Health Care (Virginia)	93.10
3. MDWise (Indiana)	92.00

HEDIS MEASURE: Pharmacotherapy Management of COPD Exacerbation - Systemic Corticosteroid

HEALTH PLAN NAME (STATE)	2013 Score
1. Medica Health Plans (Minnesota)	86.15
2. Neighborhood Health Plan (Rhode Island)	83.24
3. AmeriHealth Mercy (Pennsylvania)	81.94

Exhibit 6. *Most Improved Medicaid Health Plans, 2011-2013, Selected HEDIS Measures Related to Prescription Drug Adherence*

HEDIS MEASURE: Persistence of Beta-Blocker Therapy After a Heart Attack

HEALTH PLAN NAME (STATE)	2011 Score	2013 Score	Percentage Point Improvement
1. Blue Cross Partnership Plan (California)	60.7%	82.6%	21.9%
2. AmeriHealth Mercy (Pennsylvania)	70.3%	91.7%	21.4%
3. Keystone First (Pennsylvania)	71.7%	90.5%	18.9%

HEDIS MEASURE: Pharmacotherapy Management of COPD Exacerbation – Bronchodilator

HEALTH PLAN NAME (STATE)	2011 Score	2013 Score	Percentage Point Improvement
1. Coventry Health Care (Virginia)	75.0%	93.1%	18.1%
2. Virginia Premier (Virginia)	75.6%	86.6%	11.0%
3. Denver Health Medical Plan (Colorado)	71.0%	81.0%	10.0%

HEDIS MEASURE: Pharmacotherapy Management of COPD Exacerbation - Systemic Corticosteroid

HEALTH PLAN NAME (STATE)	2011 Score	2013 Score	Percentage Point Improvement
1. Virginia Premier (Virginia)	47.9%	75.0%	27.1%
2. Coventry Health Care (Virginia)	59.4%	79.3%	19.9%
3. Humana Medical Plan (Florida)	52.3%	67.0%	14.7%

F. Assessing the Effectiveness of the Adherence Supports Being Used

A critical component in achieving an optimal adherence support and intervention program involves accurate evaluation of the program's effectiveness. Many approaches can be taken to measure overall effectiveness, including:

- Pre-intervention versus post-intervention data analyses and adherence statistics -focusing on the same persons who received adherence support before and after
 the intervention was initiated;
- Comparisons between the intervention group and an appropriate control group;
 and
- Enrollee/caregiver surveys

In addition to assessing the program at the macro level, an optimal evaluation process will also identify how well the program is working at the *individual* level where feasible. While it often makes the most sense to initially deploy a single approach across persons who appear from computer algorithms to have similar adherence challenges, the individuals receiving this intervention will have very different responses ranging from complete non-responsiveness or unawareness of the intervention, to a behavior change that accomplishes "perfect adherence."

Even the very best initial approach that can be deployed in the aggregate will not work for everyone. Realistically, the best aggregate approach will often fall short of achieving strong adherence for the majority of targeted persons in the Medicaid arena. Therefore, it is important to assess how well the intervention has worked at the individual level and to then flexibly tailor the intervention approach, within reason, to more favorably impact those who have not responded well to the initial approach. Second-level efforts for those who did not respond to initial support and intervention could involve using a different approach altogether (e.g., providing the enrollee with a pill box rather than educational material). It might also involve using the same kind of adherence support but conveying it through a different communication channel, such as sharing the educational information via email or text messages rather than by regular mail or phone – or enlisting the enrollee's primary care physician to convey the adherence information.

G. Educational Campaigns

Medicaid MCOs often supply educational information about medication adherence through their member newsletters, websites (both the portions accessed by members and those accessed by providers), and for enrollees with asthma or diabetes, in many of their condition-specific materials such as disease management brochures. While most of the adherence content is included in a broader set of educational material (i.e., medication adherence is just one component of effective diabetes self-management), some educational efforts are fully focused on adherence. An example of a Medicaid MCO educational campaign focused entirely on medication adherence is provided in the text box below.

AmeriHealth Northeast has attempted to positively impact medication non-adherence by utilizing member outreach and education and leveraging relationships with providers to support their programs. AmeriHealth Northeast has implemented an "Our Every Day Matters" campaign, which provides education to members of the importance of medication adherence and what tools can be used to minimize the barriers to medication adherence. Through collaboration with providers, they have implemented tools for providers to identify and monitor beneficiaries struggling with adherence, such as gap alerts and rapid response teams.¹⁴

H. Eliminating Out-of-Pocket Costs

Most state Medicaid programs require modest copayments of beneficiaries for each prescription drug accessed. Information compiled by the Kaiser Family Foundation indicates that 43 states require copayments ranging from \$0.50 to \$3.00.6 Medicaid MCOs often waive these copayments to prevent a barrier to necessary pharmaceutical therapies.

The high value and low cost of simple tools in assisting with medication adherence makes it important for Medicaid MCOs to consider providing "device supports" to many of their

¹⁴ "Medication Adherence," AmeriHealth Northeast. http://www.amerihealthnortheast.com/provider/initiatives/med-adherence.aspx

enrollees. For example, taking daily pills is an easily forgettable event so some MCOs provide their members with pill boxes to support medication adherence. Pill boxes are relatively inexpensive investments for MCOs. These devices enhance an individual's ability to organize their medications and help individuals discern whether the needed medications have (or haven't) been taken. This initiative could involve providing members, as part of a disease management program, with a pill box that will best facilitate adherence with the particular medication regimen a given enrollee is taking. In some instances it may be beneficial to provide a pill-splitting (or "pill-scoring") device, if the need exists to divide full pills into smaller doses. As shown in Exhibit 7, devices that do both are readily available (serve as a weekly pill box and as a pill splitter).

Given Medicaid beneficiaries' low incomes, disproportionately low levels of education, and disproportionately high levels of language barriers, providing these kinds of devices to persons on a steady medication regimen seems to be an exceptional investment for a Medicaid program (or for a Medicaid MCO) to make.

Exhibit 7. Example of a Weekly Pill Box Product



All these kinds of out-of-pocket expenditures for the Medicaid population, while modest for non-impoverished subgroups, can pose meaningful barriers to access and adherence to appropriate medication regimens for the Medicaid population. Medicaid MCOs and state policymakers need to carefully assess whether the benefits of using a copayment,

even if minimal, to discourage unnecessary utilization of medications or usage of inappropriate and costly therapies is worth the cost of creating a financial barrier to the poverty-population's ability to access appropriate and needed medications.

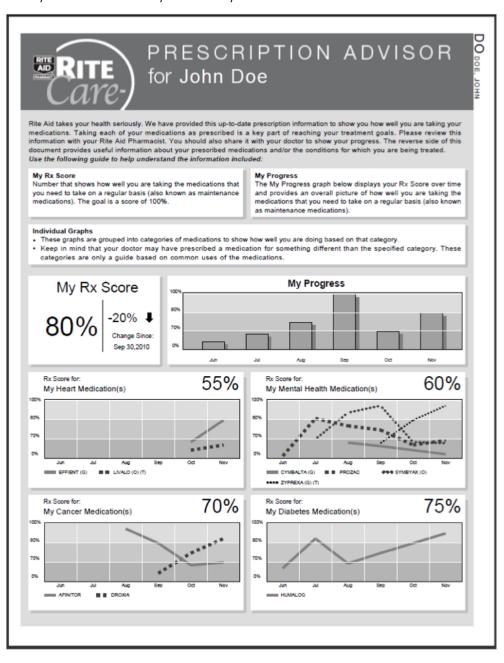
III. Pharmacy Adherence Initiatives

Pharmacies are committed to promoting prescription drug adherence both to enhance the health status of their regular customers and to support their own business interests. Different pharmacies have collectively implemented several initiatives to leverage their dispenser relationship to individuals. These initiatives are not typically Medicaid-specific but rather are used for all customers/patients of the pharmacy regardless of their health insurance program or carrier. Examples of these initiatives are described below.

- Automated Refills. Many pharmacies have created automatic refill programs. In
 these programs, for example, a one-year supply of a maintenance medication
 would be refilled automatically (in Medicaid, this would typically occur every month)
 without the customer needing to phone in a refill request. The pharmacy refills the
 medication and notifies the patient/customer that the refill is ready for pick-up.
 These notifications can occur by phone, text message, and/or by email depending
 on the customer's stated preference and the contact information provided.
 Customer permission is typically required for use of the automated refill approach.
- Educational Mailings with Refill Reminders. Some pharmacies send letters to
 individuals who are at high risk for suffering negative health impacts from nonadherence. In these letters, the pharmacy explains the individual's diagnosed
 condition and the side effects of the condition. The letter also reminds the patient
 of their next possible pick-up date for the medication.
- Patient-Specific Adherence Scores. Some pharmacies, such as Rite-Aid, calculate a
 compliance score for each patient, which indicates how well an individual is picking
 up their prescriptions for each long-term chronic condition medication. The
 compliance score is printed on the receipt for each prescription and triggers the
 pharmacist to discuss adherence with the patient/customer whenever the score is
 below a certain figure (e.g., 80%). The compliance score is coupled with an

invitation to the patient to access Rite-Aid's website to learn more about how to best adhere to the medication being taken. On the website, patients can also access a broad array of information that can help them better manage their health condition(s). A sample compliance report is in Exhibit 8.

Exhibit 8. Sample Rite-AID Compliance Report with Adherence Score¹⁵



^{15 &}quot;Prescription Advisor," Rite Aid Pharmacy. https://www.riteaid.com/pharmacy/services/prescription-advisor

IV. Summary

Because the dynamics of poverty often complicate and diminish Medicaid beneficiaries' medication adherence, focused efforts are needed in the Medicaid arena to identify and address adherence gaps. Medicaid MCOs and their contracted PBMs collectively implement a wide array of effective programs and initiatives, and in many respects exemplify the "state of the art" in supporting medication adherence. Pharmacies are also increasingly implementing progressive initiatives to support adherence for all their patients (Medicaid, Medicare, commercial, etc.). Medication adherence is increasingly being systematically measured and reported as part of the broader effort to improve quality in the Medicaid arena and the overall health care system.

While all of these developments are important and promising, significant medication adherence gaps continue to exist in the Medicaid arena, and the best practices currently deployed have not yet become standard practices across the nation. The low-cost mass communication technologies that now exist (e.g., email and text messaging between MCOs, prescribers, pharmacists, and the Medicaid beneficiaries themselves) can, for example, increase awareness of whether a refill has occurred and create other exciting opportunities for systematic adherence-related programs.

Use of low-technology, low-cost, high value supports, such as pill boxes, is also needed more universally within the Medicaid population. State policies can support strengthened Medicaid medication adherence in areas such as removing copayment requirements and extending the allowed days' supply and number of allowable refills for maintenance medications so that fewer refills and trips to the pharmacy are needed. Important opportunities exist to further support medication adherence among impoverished beneficiaries and to strengthen both the cost-effectiveness and the clinical effectiveness of the Medicaid program.