The Unintended Consequences of Pennsylvania's Department of Public Welfare Six Prescription Drug Limit

A white paper created by a special group through the Health Policy Committee of the Pennsylvania Pharmacists Association (PPA)

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Executive Summary

On January 3, 2012, Pennsylvania's Department of Public Welfare (DPW) implemented a six prescription per month policy for categorically needy adult Medical Assistance (MA) recipients, 21 years of age and older.[1] The policy was intended as a cost saving method when the 2011-2012 Pennsylvania State Budget required severe cuts within DPW, which targeted a $14.8 million reduction through reduced dental and pharmacy benefits. The decision by DPW to implement the six-drug limit was made under the premise that the majority of MA recipients would not be impacted.

The purpose of this white paper is to share the unintended consequences of DPW's six prescription policy and the burdens placed on providers and patients navigating DPW procedures. These burdens often cause delays in patients receiving medications and adversely affect prescribed treatment as witnessed in clinical practice and suggested by studies evaluating similar policies. Examples from across the country showcase the success that occurs when states collaborate and partner with the medical community to provide quality, cost effective healthcare for their Medicaid populations are also highlighted in this paper.

Under this limiting policy, physicians and pharmacists are in the unenviable position of deciding which medications to discontinue if the patient is denied an exemption by DPW. An increase in health service utilization could suggest this policy caused harm to those beneficiaries denied the seventh prescription. Overall costs, health and safety outcomes of this policy have not been critically evaluated. All factors need to be considered in order to justify implementation of this prescription limit policy as a cost-saving strategy that does not cause harm.

A collaborative approach to health care, which includes pharmacists, has been shown in several studies to improve patient outcomes, and reduce costs for the patient, the insurer and the health care system. Several states have successfully reduced inappropriate prescribing by allowing pharmacists to perform Medication Therapy Management (MTM). In 2006, the Center for Medicare and Medicaid Services (CMS) began the implementation of MTM Services to Medicare D participants. MTM is designed to help the patient get the most out of their medication and improve their health outcomes. Although MTM services have been slowly evolving under Medicare D over the last seven years, several studies have been published in medical literature showing the benefit of pharmacist provided MTM services for improving the patient's quality of life and overall reduction of healthcare costs. Recent changes in 2013, require all Medicare D patients to receive MTM services annually.

Polices limiting drug therapy are not new or innovative and have never been proven to be an effective strategy in truly reducing costs or improving patient care. However, Pennsylvania, like many other states, pursues them in place of meaningful and viable alternatives. This white paper is not intended to place blame and the Pennsylvania Pharmacists Association is sensitive to the pressure policy makers face in controlling costs in the Commonwealth. Rather, its purpose is to demonstrate that through professional collaboration with the medical and pharmacy community, there are successful alternatives for saving healthcare dollars.

Abbreviations

CMR - comprehensive medication review

CMS - Center for Medicare and Medicaid Services

DPW - Department of Public Welfare

ECF - extended care facility

ED - emergency department

FFS - fee-for-service

HMO/HMOs - health maintenance organization(s)

MA - medical assistance

MAAC – Medical Assistance Advisory Committee

MACPAC - Medicaid and CHIP Payment and Access Commission

MCO - managed care organization

MTM - medication therapy management

NEJM - New England Journal of Medicine

PCMH – patient centered medical home

PBM - pharmacy benefit manager

TMRs - targeted medication reviews

Section I. Problems for Patients and Providers

On January 3, 2012, Pennsylvania's Department of Public Welfare (DPW) implemented a policy to limit six prescriptions per month for categorically needy adult Medical Assistance (MA) recipients, 21 years of age and older.[1] DPW has developed criteria for exceptions, but the pursuit of these exceptions places undue burdens on providers and patients navigating DPW procedures, often causing delays for patients receiving medications and adversely affecting prescribed treatment. The following excerpt from a letter written by a family practice physician is one small example of the unintended consequences of this policy both in patient care and in the fiscal ramifications:

"*In March 2012 my 62 year old female patient, who has radiation ileitis/cystitis post-treatment for cervical cancer, mild dementia, diabetes and cirrhosis, was admitted to our local hospital. She had been in an extended care facility (ECF) for several weeks prior to this after a previous lengthy admission to the hospital. She had been discharged from the ECF in very good condition and given a short supply of the medications she was taking at the ECF, plus new prescriptions to be filled for on-going treatment. I examined her two days prior to her hospital admission - about ten days after discharge from the ECF. Her sons, who were caring for her, noted that they could not fill the prescriptions given to them by the ECF and requested a letter from me authorizing them to be filled. I called and sent a letter to the managed care organization (MCO) since no prior authorization form was yet available. The day after her visit, she began feeling very weak and having diarrhea. She was admitted to the hospital with hypokalemia (low potassium) and diarrhea due to her inability to comply with my prescribed medication regimen, which is a direct result of the MCO not automatically covering the potassium that she required. She was also in a withdrawal syndrome due to the lack of access to her other medications. She was hospitalized for four days, during which time her necessary medications were restarted and her potassium and other electrolytes were balanced.*

It was only after this second hospitalization that the patient was able to receive all nineteen of her required medications. That did not occur, however, until I had filled out nineteen separate prior authorization forms (all with the same basic information) and the MCO had reviewed and approved the orders.

I am sure that there was a significant increase in the expenditure of resources due to the six-medications per month regulation in this case. Unfortunately, the patient also suffered both illness and further hospitalization in the process.

In my opinion, this regulation is likely to increase cost, morbidity, and perhaps even mortality."

William Fife, MD
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Section II. Issue Introduction and Background

In tough economic times, many states are being forced to make significant cuts to balance budgets. Unfortunately, the most financially disadvantaged of Pennsylvania's adult population bear a disproportionate burden in this process. Adult MA patients are being required to risk their health and wellbeing on an arbitrary policy limiting the number of prescription drugs that may be obtained in a given month. On January 3, 2012, Pennsylvania's DPW implemented this policy for categorically needy adult MA recipients, 21 years of age and older, limiting them to six prescriptions per month.[1] DPW has developed criteria for exceptions that, in itself, place undue burdens on providers and patients navigating DPW procedures; often causing delays in patients receiving medications and adversely affecting prescribed treatment.

DPW, in a December 30, 2011, bulletin, provided its background research by stating, "Based on MA program utilization and claims data from FY 2009-2010, 11% percent of 75,850 MA prescription recipients received seven or more prescriptions per month."[1] As a result, DPW decided on a six-drug limit, rationalizing that the majority of MA recipients would not be impacted. DPW failed to provide information on the types of medications, medical conditions of this subset of patients, or what impact this policy would have on the long-term health of the patients. Like many states, Pennsylvania DPW lacks research that goes beyond cost analysis. It has limited access to real time data that tracks direct links on patient centered outcomes.[2]

The primary motivator for DPW current policy stems directly from the 2011-2012 Pennsylvania State Budget, which required a $14.8 million reduction through reduced dental and pharmacy benefits, with a target savings of $8.6 million in the fee-for-service (FFS) program.[3] This reduction was a result of the continued economic downturn in the Commonwealth, as well as the loss of federal stimulus funding in the Pennsylvania budget. Evidence provided to the DPW's Dental and Pharmacy Report about the six-drug limit appeared to show the decision was based on cost alone rather than any reduction in harm or risk to vulnerable populations. In addition, DPW did not conduct or offer evidence of patient impact studies or evidence-based protocols supporting the six-prescription limit versus other arbitrary limits or other cost saving strategies provided.

DPW has the dual concern of ensuring high quality care while maintaining the lowest cost to taxpayers. Often times the cost factors outweigh the quality of care, particularly without extensive patient data to support them. To ensure comparable access to high quality care, the Kaiser Commission on Medicaid and the Uninsured recommends that the Medicaid and CHIP Payment and Access Commission (MACPAC) calls for research to track the clinical outcomes of patients in FFS and Managed Care Organizations (MCOs), and to monitor the rate at which denials are overturned on appeals.[4] Previous studies examining the impact of limited drug

coverage in senior citizens have shown consistent links with increased long-term care admissions and hospitalizations.[5,6] Investing in additional research would assist in making better informed decisions for MA patients.

Pennsylvania policy impacts the poorest of our population who can least afford to pay for medications over the six drug monthly limit. For example, MA adult coverage extends only to adults with dependent children and those whose income is a maximum of 46% of the Federal Poverty Level. For a family of three that is $8,781 a year.[7] Ethical considerations often are not mentioned in state policy decisions. To this point, ethicists comment, "the irresolvable ethical problem of medication limits being imposed on the sickest and poorest patients - and not the medically inappropriate use of drugs - brings to fruition the idea that MCOs and pharmacy benefit managers (PBMs), who may have other considerations, are making treatment decisions."[8]

The unintended consequences of decreased health status for patients in capped prescription coverage plans have been well documented over the past twenty years. According to a 2006 *New England Journal of Medicine (NEJM)* article, people with limited prescription coverage skip their medicines, make more trips to the hospital and die sooner than patients with unlimited benefits. The death rate is 22% higher in capped patients than in those with unlimited benefits.[6,9]

Physicians and pharmacists are in the unenviable position of deciding on which medications to discontinue if the patient is denied an exemption by the DPW. In addition, providers are being forced to face additional costs, including increased time of filling prescriptions, added paperwork and problems processing claims that are in the gray exception area of DPW guidelines. This time could be better spent in actual patient care and assessment of the patient's medication regimen.

Section III. Data on Pennsylvania Department of Public Welfare's and Other State Medicaid Programs that Have Implemented a Similar Policy

In December of 2012, the DPW presented data to their Medical Assistance Advisory Committee (MAAC) on the impact of the implemented MA policy that limits beneficiaries to six prescriptions per month.[10] The services addressed in this presentation include emergency department (ED) visits, hospital admissions, and ambulatory care surgeries. Figures 1 and 2 below demonstrate the use of these services by beneficiaries who received six or more prescriptions per month and who were denied the seventh prescription during any month, respectively. The percentage of beneficiaries who utilized ambulatory care surgeries decreased overall for both groups over both time periods. The percentage of beneficiaries with ED visits and hospital admissions remained roughly the same for beneficiaries receiving seven or more prescriptions per month, but increased for beneficiaries who were denied the seventh prescription.[10] The actual significance of these changes is difficult to assess without full statistical data present and without knowing how the environment influenced these services, which could be determined by trending service use for the same beneficiary groups over previous years.

Figure 1

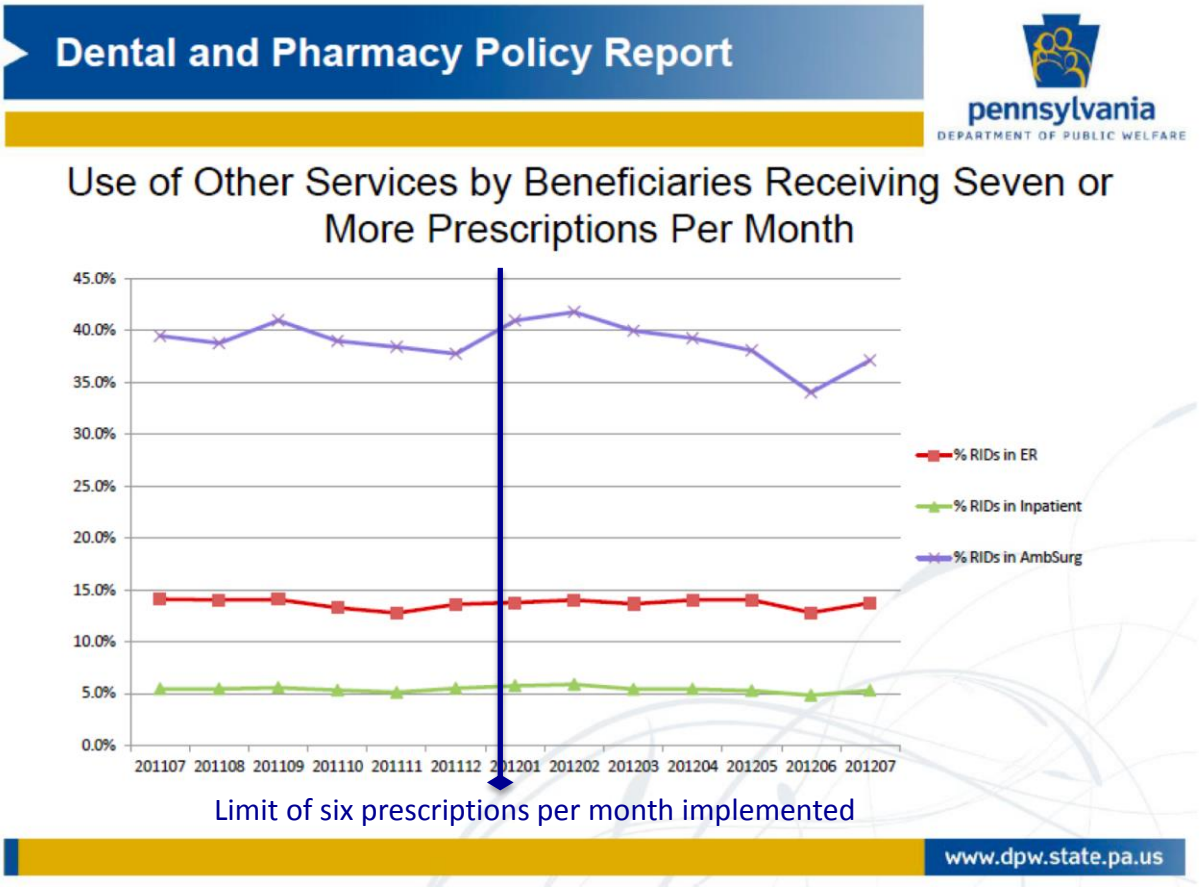
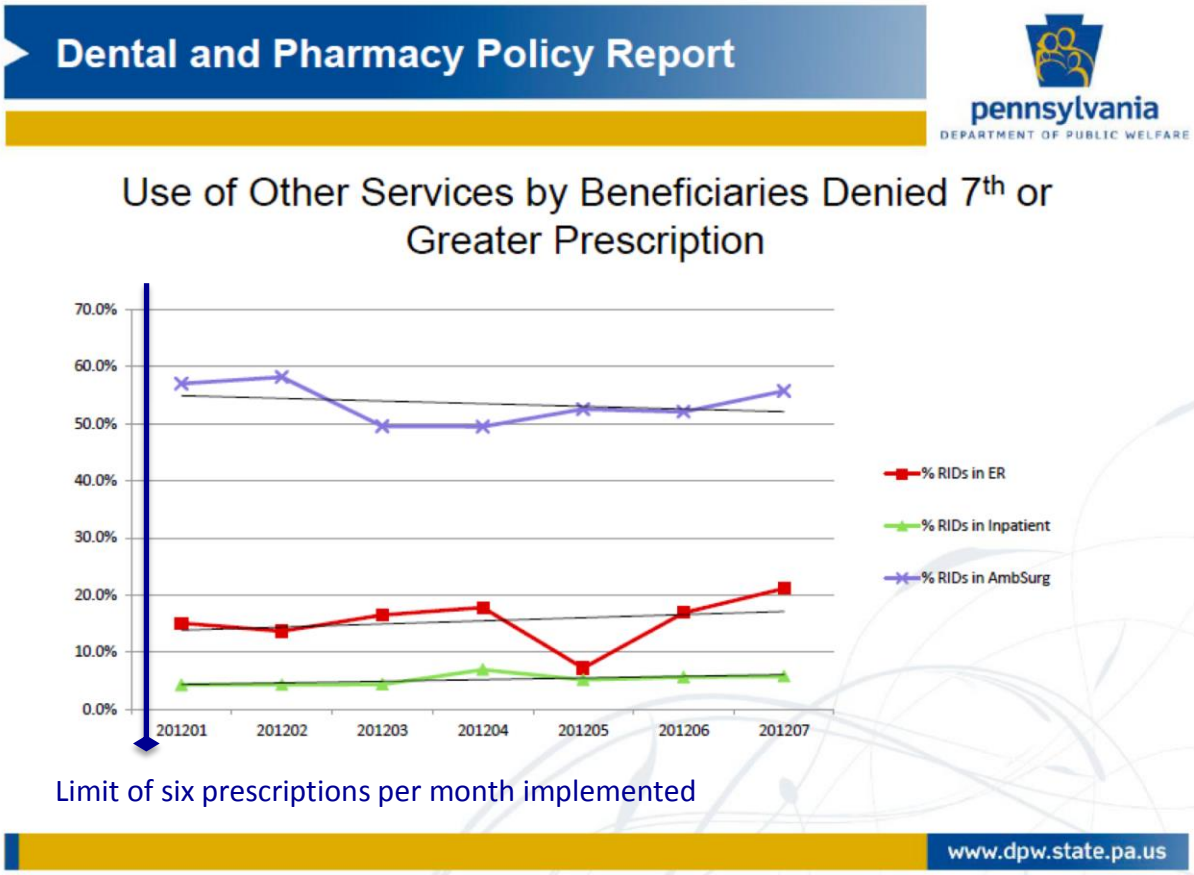
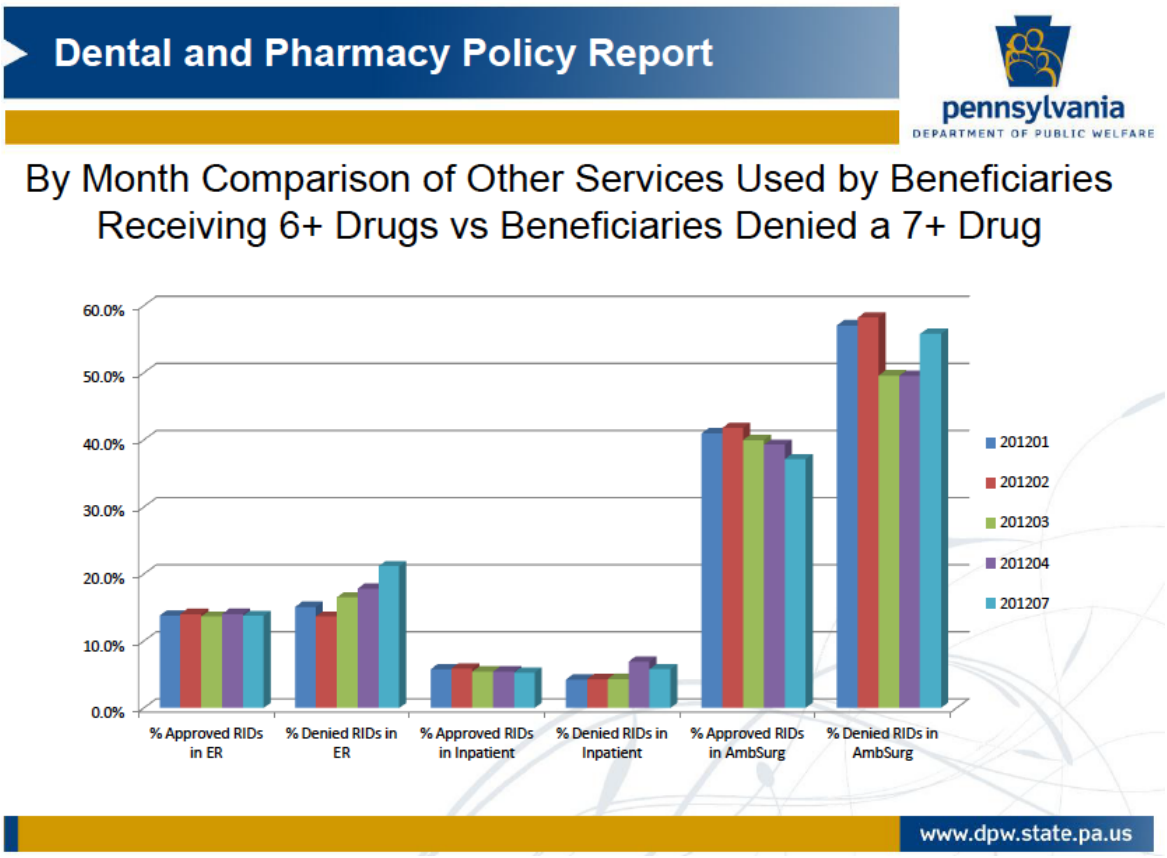


Figure 2



Finally, the two patient groups were compared in Figure 3 (below), which demonstrates a greater percentage of ED visits and ambulatory care surgeries for beneficiaries who were denied a seventh prescription.[10]

Figure 3



An increase in health service utilization could suggest this policy caused harm to those beneficiaries denied the seventh prescription. Nonetheless, the conclusions presented by the DPW claim to have saved $6.5 million by the third quarter and likely would reach their goal of $8.6 million saved by the end of the fourth quarter; however, this claim fails to address changes in costs incurred from utilization of other services.[10] Overall costs and health and safety outcomes of this policy have not been critically evaluated, and data for the final quarter were not presented. These factors need to be critically evaluated in order to justify implementation of this prescription limit policy as a cost-saving strategy.

Pennsylvania is one of 16 states that are attempting to reduce prescription expenditures with a monthly medication cap. The other 15 states include Arkansas, California, Illinois, Kansas, Kentucky, Louisiana, Maine, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Utah and West Virginia. Details of these policies are specific to each state, but available reports suggest that a monthly medication cap might not be the answer, and states are still

trying to find a means of reducing prescription expenditures without increasing expenditures in other areas. For example, studies of New Hampshire's Medicaid policy report a change from a monthly prescription cap to a $1 copay for each prescription.[9] Furthermore, North Carolina adjusted their prescription limitation policy from six prescriptions to eight prescriptions per month.[11] Even in the state of Pennsylvania, DPW required all participating MCOs to add certain medications to the exemption list, effective April 22, 2013.[12]

When the history of implementation of similar policies is considered, the current trend in health care resource utilization by Pennsylvania MA beneficiaries is not surprising. Evaluations of similar policies implemented in other states have demonstrated a considerable increase in health care resource utilization despite an increase in prescription cost savings realized by the state Medicaid programs.

Section IV. Exploring the Weakness and Risks of Drug Limitation Policies - Research on Unintended Consequences and Economics

The following discusses the effects and consequences of drug limitations on clinical and economic outcomes. Three different studies by Soumerai and colleagues examined the effects of restricting Medicaid reimbursement on healthcare utilization.[9, 13, 14] They compared the restricted formulary of New Hampshire to the unrestricted formulary of New Jersey. The first study examined the impact of restricting psychotropic drug use while the second and third studies examined the impact of a three-prescription limit on utilization of healthcare resources. The investigators found that despite a decrease in medication use and the cost for the health plan, these restrictions were associated with an increase in nursing home admissions, ED visits and use of mental health services. There was no commensurate increase in hospital admissions.[9,13,14] The results of these studies suggest that while there is a decrease in cost associated with putting limits on medications, there may be a resultant increased use of other health services, which may negate any savings.

Similarly, Horn et al. conducted a study examining the effect of cost-containment strategies on the health outcomes of members of six geographically dispersed Health Maintenance Organizations (HMOs).[15] Controlling for variables such as age, gender, number of physicians seen, type of organization and type and severity of illness, the researchers focused on patients with asthma, ear infections, arthritis, ulcers and high blood pressure. Nearly 13,000 patients, accounting for nearly 100,000 office visits and 240,000 prescriptions, were entered into the 12-month study period. They found that those HMOs employing restrictive formularies had patients seeing physicians more frequently, more visits to the emergency room and more hospitalizations. The relationship between formulary restriction and increased resource utilization was found across all five disease states, regardless of disease severity.[15]

In a later study, Soumerai and colleagues examined the impact of formulary restrictions on medication and healthcare service use.[16] They examined antipsychotic agents after Maine instituted a prior-authorization and step-therapy policy, which affected patients new to antipsychotic agents. This policy limited the use of specific medications to only after a trial of preferred medications. When compared to a non-restricted state formulary, Maine Medicaid saw a 29% increase in risk of treatment discontinuation with minimal savings associated with medication costs.[16]

Wang and colleagues conducted a retrospective database analysis comparing Louisiana and Indiana Medicaid claims for diabetes, hypertension and hyperlipidemia prescriptions from 2001 to 2003.[17] In this analysis, the authors employed a non-equivalent comparator strategy to analyze if placing a limit on the number of prescriptions affected medication adherence. It did

not study health outcomes or healthcare costs. The results showed no difference in adherence before implementation between the groups and afterwards, only a slight (13%) difference in discontinuation of lipid-lowering drugs in the state (Louisiana) that implemented the limit policy. While the study stated that the evidence was "inconclusive," it suggested implementing policies that limit the number of medications have an impact on adherence.[17]

Known for its rigorous analysis of the available research on many topics of scientific interest, the Cochrane Review in 2008[18] published a database review of the effects of caps and copayments. This review documented there is a low quality of evidence regarding the clinical and financial impact of such restrictions and that evidence does not support the use of caps to help curtail drug utilization costs. It also cites the 1994 Soumerai study[14] as evidence prescription limits increased utilization of other healthcare services for vulnerable patients, which is troubling from a quality of care and cost saving perspective.[18]

The previous data shows that limiting the quantity of drugs available does have a short-term effect on drug utilization and drug costs. This drug cost reduction is offset by an increase in the number of patients requiring medical treatment such as nursing home admissions. Later examination of similar situations using atypical antipsychotics showed that quantity limits increase drug discontinuation, which may also drive up healthcare costs on hospitalizations and emergency department visits.

Section V. Alignment with State and National Health Goals and Policies

In addition to concerns that the policy leads to an increase in health care utilization that is not necessarily offset by the prescription cost savings, the drug limitation policy is concerning because it does not align with health care goals set on a national level. Nationwide efforts have been drafted and implemented to improve the health care system through promotion of patient centered care and research using patient specific outcomes. The efforts are demonstrated and emphasized in the Patient Protection and Affordable Care Act through recognition of patient-focused cost-saving strategies such as medication therapy management (MTM) services and the patient centered medical home model (PCMH).[19] Additionally, the Patient Protection and Affordable Care Act addresses Medicaid's core set of adult health quality measures, which require certain targets are reached to ensure health of the community served.[19] For example, assistance with smoking cessation is listed as a Medicaid quality measure; however, smoking cessation aids are not considered exempt in DPW's drug limitation policy and must be filled as one of the first six prescriptions covered that month if a patient wants to increase their chances of successfully quitting smoking.[20] A likely scenario is a patient who does not fill an anti-smoking medication because he has reached his six drug limit, thereby decreasing his chances of quitting and worsening his long term health outcomes.

Section 3502 of the Patient Protection and Affordable Care Act supports the PCMH model and emphasizes a core feature of this model is to "provide quality-driven, cost-effective, culturally appropriate, and patient- and family-centered health care".[19] Several studies have proven that other approaches to medication management, such as MTM services, pharmacist involvement in medication management, and facilitation of transitions of care have improved costs associated with medical care.[21] Patients are still satisfied with care and will refrain from using unnecessary medications or continue essential medications if they receive tailored education emphasizing the medication's importance to their health care.[22-24] An approach to medication management that promotes patient collaboration with a health care team and understanding of their medication regimen is more in line with national goals for health care and medication use than limiting patients to an arbitrary number of prescriptions per month.

Section VI. Alternatives for Cost-Savings in Medicaid Drug Costs

The ensuing section discusses cost-saving alternatives to combat the increase in Medicaid drug costs, while providing a high quality of care. Soumerai and colleagues[9, 25] report that policies to limit the number of medications covered for Medicaid recipients have many risks as well as benefits. Their article shows that monthly prescription limitations can adversely affect health status and cause shifts to more costly types of care, such as hospitalizations.[9,25] For instance, a system that targets inappropriate prescribing before or during implementation of cost control policies provides a better approach.[25] In particular, a collaborative approach to health care, which includes pharmacists, has been shown in several studies to improve patient outcomes, and reduce costs for the patient, the insurer and the health care system.

Several states have successfully reduced inappropriate prescribing by allowing pharmacists to perform MTM. In 2006, the Center for Medicare and Medicaid Services (CMS) began the implementation of MTM services to Medicare D participants. MTM services are collaborative efforts between a pharmacist, the patient or the caregiver and an assortment of other licensed healthcare professionals to promote safe and effective medication use. The overall goal of MTM is to optimize medication use to improve patient outcomes[26]. MTM has slowly evolved, including recent changes in 2013, which requires all Medicare D patients to receive MTM services annually. According to CMS, MTM services consist of two processes; one of which is an annual comprehensive medication review (CMR), which is an interactive person-to-person consultation provided by a pharmacist.[27] During the CMR consultation, the pharmacist will perform the following tasks: (1) Assess the patient's health status (2) Perform a comprehensive medication review that identifies, resolves and prevents medication related problems (e.g. adverse drug reactions, medication adherence, inappropriate medication usage) (3) Formulate a medication action plan (MAP) for the patient, physician and other healthcare providers.[28]

In addition to an annual CMR, CMS also requires that Medicare D plans implement quarterly targeted medication reviews (TMRs). TMRs focus on specific or potential medication related-problems, such as unnecessary drug therapy, incorrect dosage, more effective drug available, adverse drug reaction, and medication noncompliance. The goal of a pharmacist centered TMR is to reduce the high healthcare costs associated with medication related problems, like increased utilization of emergency room visits and hospitalizations.[29]

Implementation of MTM services has evolved slowly under Medicare D over the last seven years, despite the publication of several studies that show the benefit of pharmacist provided MTM services for improving the patient's quality of life and reducing overall healthcare costs. The following studies show the benefit of MTM services performed by pharmacists in the community.

A randomized controlled trial by Touchette concluded that patients who received pharmacist provided MTM services had a significant decrease in drug related problems compared to patients who did not receive MTM services, and the physician response to recommendations by a pharmacist was greater than 50%.[30] Another study concluded that pharmacist provided MTM services improved adherence in high-risk patients leading to reduced overall health care costs, including insurer fees, reduced inpatient episodes and overall improvement of health outcomes and medication usage.[31] Lastly, Kucukarslan et al. reviewed several randomized controlled studies analyzing MTM services conducted between 1989-2009. The results displayed that pharmacists' timely communication with primary care providers regarding changes in medication therapy, combined with routine patient follow up improved medication adherence. The collaboration between pharmacists and physicians was shown to have the greatest benefit.[32]

Another area in which community pharmacist provided MTM services can help reduce Medicaid healthcare costs is the prevention of hospital readmissions. A study by Dudas et al. concluded that by having pharmacists call patients soon after discharge from inpatient care to discuss drug therapy allowed intervention before medication-related issues could arise, and reduced rates of hospital readmission.[33] Likewise, Smith et al. showed, over the course of a year, a 56% decrease in hospital readmission rates after MTM services were provided to patients. These patients reported a reduction in bed-bound episodes by 35%.[34] Finally, Kilcup et al. concluded patients who received a phone call from a pharmacist within seven days of hospital discharge to review medication therapy had a statistically significant reduction in readmission rates. Approximately 80% of these patients had at least one medication discrepancy upon discharge. These findings equated to a $35,000 reduction in healthcare costs per patient and translated to $1.5 million in annual savings for the total number of patients in the study.[35]

Pharmacists are the medical professional of choice to implement MTM services because pharmacists are the medication experts and patients see their community pharmacist seven times more frequently than physicians.[36] In addition, the costs associated with pharmacists' clinical services are far more favorable than the cost savings seen through restrictions on medications because of the additional costs for hospitalization and emergency services that may result from the restrictions. A recent study in the *Health Affairs* journal showed that when a retail pharmacist was involved in a face-to-face based diabetes services, the pharmacist interventions were cost-effective with a return on investment of approximately $3 for every $1 spent.[37]

In 2006, Zingone et al. estimated a pharmacist's reimbursement for cognitive services per visit between $1 and $3 per minute.[38] Specifically Minnesota implemented a MTM service for low-income patients with complex drug-related needs as a collaborative effort between physicians and pharmacists. The pharmacists were reimbursed less than $100 per session and according to this program, pharmacists resolved an average of 3.1 medication problems per patient with a potential annual cost savings to the state of $15,325 per patient.[39]

Medication Therapy Management (MTM) services has evolved from a Medicare program to state and private prescription programs, with the goal of reducing healthcare costs and improving the health of program beneficiaries. There are numerous examples of innovative and transformative ways states across the country are overcoming the challenges of providing high quality healthcare for their Medicaid and Medicare population while reducing costs and spending, which are evidenced below in Appendix A. Collaboration across healthcare disciplines, including community pharmacists, is the common thread that all these programs share. By challenging the status quo, these ideas and initiatives demonstrate that a commitment to improving patient care and outcomes through collaboration and creativity lead to smarter spending and greater savings. Listed below are just three examples of state pharmacist MTM services.

1. The Missouri Medicaid Pharmacy-Assisted Collaborative Disease Management Program is estimated to reduce per capita annual program expenditures by $6,804 and has generated annualized program savings of $2.4 million.[40]

2. In a CMS demonstration project in Connecticut, nine pharmacists worked with 88 Medicaid patients from July 2009 to May 2010 to identify and resolve drug therapy problems, resulting in estimated annual savings of $1,123 per patient on medication claims and $472 per patient on medical, hospital, and emergency department expenses. The estimated total savings were approximately 2.5 times the cost of the fees for the pharmacists and network administration.[41]

3. The Minnesota MTM care law became statute in 2005 based on favorable outcome data from state pharmacist Medicaid programs in Missouri, North Carolina, Ohio, Florida and Iowa. A yearlong evaluation of Minnesota's Medicaid MTM program found that pharmacists identified and resolved 789 drug therapy problems in 259 recipients, equating to 3.1 drug therapy problems per recipient. Inadequate therapy (e.g. dose too low for effectiveness, need for additional preventive therapy, and noncompliance) represented 73% of resolved drug therapy problems.[42]

These and other programs demonstrate the benefits to patients, taxpayers and state agencies that collaborating with pharmacists provides. Recognizing the role of pharmacists as health care providers yields long-term benefits versus implementing poorly designed quick fix policies, such as MA prescription limits. These alternative solutions could and should be established here in the Commonwealth of Pennsylvania through the collaboration with organizations such as the Pennsylvania Pharmacists Association, the DPW, the MCOs and the pharmacist professionals that are practicing daily in the community and ambulatory care setting. Such an innovative program can be established. The ultimate goal of MTM services is to use pharmacists' expert drug knowledge to improve patient outcomes and reduce overall healthcare costs, and these services can be integral to an innovative, collaborative program to improve the medication therapy of Pennsylvania Medicaid recipients.

Section VII. Conclusion

Dr. William Fife, the family practice physician who authored the letter of concern in Section I, reminds us of the human toll that can occur when policies intended to save money come at the expense of patient care. Controlling and reducing costs is something state Medicaid programs are always up against in our current healthcare environment. However, quick decisions of policy makers, to provide cost savings in a short period of time, can often lead to an increase in patient risks or even harm. These quick decisions can also lead to additional long-term costs.

The December 30, 2011 the MA Bulletin stated "limiting the pharmacy benefit packages for adult MA recipients to six prescriptions per month will allow the DPW to realize significant cost savings with minimal impact to MA recipients". However, DPW has yet to provide evidence that this impact was minimal for the vulnerable population. This population of Medicaid recipients does not have access to medications or a plan for what to do when medications are unavailable, especially those medications that cannot be abruptly stopped without risk of adverse drug withdrawal events. As early as August 2012, just six months after the implementation of this policy, the DPW had information, which clearly indicated patients who were denied medication were using the emergency room, and being admitted to the hospital more than those receiving all their prescribed medication.

Despite the human toll, the policy was continued and extended into 2013. Any savings realized for medications were likely exceeded by the costs for increased utilization of emergency room visits, hospitalizations, and administration of the program. The policy forced insurance companies to spend money to comply and operationalize the program. Physicians and their staffs had to spend time and resources away from patient care to administrate the forms and to change treatment plans, resulting in delayed or absent treatment. In most instances the cost to administrate the policy costs more than the savings of the medication being denied.

Polices such as these are not new or innovative and have never been proven to be an effective strategy to reduce costs or improve patient care. However, Pennsylvania, like many other states, pursues them in place of meaningful and viable alternatives. This white paper is not intended to show blame, and is sensitive to the pressure policy makers are up against in controlling costs for our state. However this paper was written to show that with professional collaboration there are successful alternatives for saving healthcare dollars.

This document has provided examples from across the country to showcase the success that occurs when states are willing to collaborate and partner with the medical community to provide quality, cost effective healthcare for their Medicaid populations. Pharmacists, physicians, nurses, insurance providers, and many others in the health care field together

provide a wealth of knowledge and opportunity to construct these types of combined programs. Empowering pharmacists to provide patient care services such as comprehensive and targeted medication reviews and treatment recommendations has been proven to reduce costs and improve patient care. It is estimated that about 75% of patient care occurs after diagnosis and initiation of treatment. It is during this part of patient care that pharmacists have proven to make a tremendous impact on adherence to treatment plans, identifying and resolving medication related problems, adverse effects, and drug interactions; addressing cost issues; and making follow up calls, all of which directly or indirectly contribute to success of the treatment. Successful treatment reduces costs by avoiding medication errors, emergency room visits, and hospital admissions. Allowing pharmacists greater opportunity to collaborate with patients, physicians, and other healthcare providers will help ensure patient safety and patient care. Pennsylvania has the opportunity to begin a new path toward ensuring all citizens have access to and benefit from the best healthcare available, while reducing overall costs. All this is possible without risking patient safety or patient care.

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Appendix A. State Summary

CARILION NEW RIVER VALLEY MEDICAL CENTER
Project Title: "Improving health for at-risk rural patients (IHARP) in 23 southwest Virginia counties through a collaborative pharmacist practice model"
Geographic Reach: Virginia
Funding Amount: $4,162,618
Estimated 3-Year Savings: $4,308,295
Summary: Carilion New River Valley Medical Center, in partnership with Virginia Commonwealth University School of Pharmacy, Aetna Healthcare and CVS/Caremark, is receiving an award to improve medication therapy management for Medicare and Medicaid beneficiaries and other patients in 23 underserved rural counties in southwest Virginia. Their care delivery model, involving six rural hospitals and 17 primary care practices, will train pharmacists in transformative care and chronic disease management protocols. Through care coordination and shared access to electronic medical records, the project will enable pharmacists to participate in improving medication adherence and management, resulting in better health, reduced hospitalizations and emergency room visits, and fewer adverse drug events for patients with multiple chronic diseases.

PITTSBURGH REGIONAL HEALTH INITIATIVE
Project Title: Creating a Virtual Accountable Care Network for Complex Medicare Patients
Geographic Reach: Pennsylvania **Funding Amount:** $10,419,511 **Estimated 3-Year Savings:** $74.1 million
Summary: Pittsburgh Regional Health Initiative is receiving an award for a plan to create specialized support centers, staffed by nurse care managers and **pharmacists**, to help small primary care practices offer more integrated care within the service areas of seven regional hospitals in Western Pennsylvania. The project will focus not only on approximately 25,000 Medicare beneficiaries with COPD, CHF, and CAD, but also the general primary care population of this area. The resulting teams will provide support for care transitions, intensive chronic disease management, medication adherence, and other problems associated with a lack of communication in health care systems at large and the resulting fragmentation of health care for patients. This approach is expected to reduce 30-day readmissions and avoidable disease-specific admissions with estimated savings of approximately $74 million. Over the three-year period, Pittsburgh Regional Health Initiative's program will train an estimated 450 health care workers and create an estimated 26 new jobs. These workers will combine core competencies in the management of specific diseases with primary care support skills, and will be trained in evidence-based pathways of care.

SUTTER HEALTH
Project Title: "Advanced Illness Management (AIM)"
Geographic Reach: California
Funding Amount: $13,000,000
Estimated 3-Year Savings: $29,388,894
Summary: Sutter Health is receiving an award to expand their Advanced Illness Management program (AIM) across the entire Sutter Health system in Northern California, serving patients who have severe chronic illness but are not ready for hospice care, are in clinical, functional, or nutritional decline, and are high-level consumers of health care. Such patients generally experience poor care quality, but account for a disproportionate share of Medicare spending. AIM addresses these issues through a complex medical home model that uses nurse-led interdisciplinary teams to coordinate and deliver care that encourages patient self-management of chronic illness, that modifies disease course and provides symptomatic relief. The program will improve care and patient quality of life, increase physician, caregiver, and patient satisfaction, and reduce Medicare costs associated with avoidable hospital stays, emergency room visits, and days spent in intensive care units and skilled nursing facilities. Over a three-year period, the Sutter Health's program will train an estimated 192 workers and will create an estimated 89 jobs. The new workforce will include training care transition teams comprised of social workers, nurse practitioners, **clinical pharmacist** and home care aides.

UNIVERSITY OF HAWAII AT HILO
Project Title: "Pharm2Pharm, a formal hospital **pharmacist** to community pharmacist collaboration"
Geographic Reach: Hawaii
Funding Amount: $14,346,043
Estimated 3-Year Savings: $27,114,939
Summary: The University of Hawaii at Hilo and its College of Pharmacy, in partnership with Hawaii Health Systems Corporation and Hawaii Pacific Health, community pharmacies in rural counties of Hawaii, the Hawaii Health Information Exchange, and Hawaii Health Information Corporation, is receiving an award to improve medication reconciliation and management for the elderly in three rural counties of Hawaii. The program will integrate pharmacists into hospital and ambulatory care teams and use health information technology for decision-making support and to enhance communication, particularly between **hospital pharmacists and community pharmacists**. The result will be better care transitions, a reduction in adverse events, improved medication adherence, and better-informed, more patient-centered decisions about medication therapies, leading to reduced hospitalizations, readmissions, and emergency room visits and better health care and health for the patients served. Over a three-year period, the University of Hawaii at Hilo's program will train new workers including a pharmacist project coordinator, a certified project management professional, a physician leader/care transition

expert, a measurement and evaluation expert, a contracts administrator, and an administrative assistant.

UNIVERSITY OF IOWA
Project Title: "Transitional care teams to improve quality and reduce costs for rural patients with complex illness"
Geographic Reach: Iowa
Funding Amount: $7,662,278
Estimated 3-Year Savings: $12,500,000
Summary: The University of Iowa, in partnership with the 11 hospitals comprising its Critical Access Hospital Network, is receiving an award to improve care coordination and communication with practitioners in ten rural Iowa counties. The program will serve Medicare, Medicaid, and Medicare/Medicaid dual-eligible beneficiaries and privately insured and uninsured patients who have complex illness, including psychiatric disorders, heart disease, kidney disease, cancer, endocrine and gastrointestinal disorders, and geriatric issues. The program will coordinate care through teams comprised of nurses, social workers, **and pharmacists** along with specialty physicians (including psychiatrists) using telehealth and web-based personal health records. The program is based on the University of Iowa's significant past experience in creating telehealth care teams for patients with diabetes, chronic obstructive pulmonary disease, and heart failure. It will increase access to services and specialty care, improve care transitions and care coordination, and decrease avoidable hospital readmissions of complex patients in rural counties in Iowa. Over a three-year period, the University of Iowa's program will train an estimated 22 workers and will create an estimated 28 jobs. The new hires will include eleven community coordinators, two project managers, a program secretary, an outcomes analyst, a qualitative analyst, a database manager, nurse team leaders, social workers, and an informatics director.

UNIVERSITY OF SOUTHERN CALIFORNIA
Project Title: “Integrating **clinical pharmacy services** in safety-net clinics”
Geographic Reach: California
Funding Amount: $12,007,677
Estimated 3-Year Savings: $43,716,000
Summary: The University of Southern California is receiving an award to integrate clinical pharmacy services into safety net clinics, providing medication therapy management, disease state management, medicine reconciliation, medication access services, patient counseling, drug information education, preventive care programs, provider education, and quality improvement review for care providers and for the underserved and vulnerable populations of Santa Ana, Huntington Beach, and Garden Grove. This will improve medication adherence, confirm the appropriateness and safety of medication use, and reduce avoidable

hospitalizations and emergency room visits, while improving patient and population health. Over a three-year period, The University of Southern California program will train an estimated 17 workers and will create an estimated 27 jobs. The new workforce will include a programmer, a project manager**, six pharmacists, and six pharmacy residents**. Additionally, this program will partner with the East Los Angeles Occupational Center technician training program to develop curricula that will expand the roles of the 11 pharmacy technicians who will be trained to perform patient navigator and data management duties in clinical pharmacy teams.

UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
Project Title: "Project SAFEMED"
Geographic Reach: Tennessee
Funding Amount: $2,977,865 **Estimated 3-Year Savings:** $3,160,844
Summary: The University of Tennessee Health Science Center, in partnership with Methodist LeBonheur Healthcare's Methodist North Hospital and Methodist South Hospital, QSource, United Healthcare, BlueCross BlueShield and its BlueCare Medicaid plan, Southwest Tennessee Community College, the Tennessee Pharmacists Association, and the Bluff City, Bin Sina, and Memphis Medical Societies, is receiving an award to improve medication adherence and effective medication usage among high-risk patients in the northwest and southwest sections of Memphis, TN. The program will serve vulnerable adults (20-64) and seniors 65+ insured by Medicaid and/or Medicare who have multiple chronic diseases, including hypertension, diabetes, coronary artery disease, congestive heart failure, and chronic lung disease, as well as polypharmacy and high-inpatient utilization. Through teams of pharmacists, nurse practitioners, pharmacy technicians, and licensed practical nurse outreach workers based in outpatient centers, the program will work with primary care physicians and local pharmacies to provide comprehensive medication management. This approach will reduce avoidable prescription drug utilization, prevent adverse drug events, reduce resulting patient morbidity and mortality, reduce avoidable hospital admissions, and lower cost. At the same time it will improve medication adherence, disease management, and patient health. Over a three-year period, the University of Tennessee Health Science Center's program will train an estimated 8 workers, while creating an estimated 11 jobs. The new positions will include outreach workers, outreach directors, and pharmacy techs