Commonwealth of Massachusetts
Office of the State Auditor
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Making government work better

Official Audit Report – July 25, 2013

Office of Medicaid (MassHealth) – Review of Controls over Pharmacy Claims
For the period July 1, 2009 through June 30, 2011

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INTRODUCTION AND SUMMARY OF FINDINGS AND RECOMMENDATIONS

The Massachusetts Executive Office of Health and Human Services administers the state's Medicaid program, known as MassHealth, which provides access to healthcare services, including pharmacy services, annually to approximately 1.3 million eligible low- and moderate-income recipients. The MassHealth Pharmacy Program is responsible for providing and managing prescription and selected over-the-counter medications for all non-Medicare beneficiaries, with the exception of those in managed care.[1] In addition, MassHealth fills in coverage gaps for uncovered drug classes for the 220,000 dual-eligible beneficiaries (i.e., those who are eligible for both Medicare and Medicaid) who were transferred to private prescription drug coverage in 2006 as a result of the Medicare Modernization Act of 2003. The Pharmacy Program has as its foundation several components: a comprehensive list of which drugs require prior authorization for dispensing; drug management strategies stressing appropriate drug use and generics when indicated; drug price management; monitoring of quality; provider, pharmacist, and patient education; and the setting of benefit design and other policies.[2] MassHealth paid approximately $1 billion in pharmacy claims in total during fiscal years 2010 and 2011.

Our audit was conducted as part of the Office of the State Auditor's ongoing independent statutory oversight of the Commonwealth's Medicaid program. The heightened concern over the program's integrity was evidenced in January 2003, when the U.S. Government Accountability Office placed the U.S. Medicaid program on its list of government programs that are at "high risk" of fraud, waste, abuse, or mismanagement. Our audit focused on Medicaid claims data relating to prescriptions for pharmaceuticals that have the highest potential for abuse. This category of drugs includes opioids (e.g., Oxycontin, Vicodin, Percocet) and other oxycodone products that are generally prescribed for pain relief.

One important aspect of being able to effectively analyze pharmaceutical claims data is the ability to identify occurrences of potential drug diversion. The Massachusetts Department of Public Health (DPH) defines drug diversion as the channeling of licit pharmaceuticals for illicit purposes. Illicit purposes include prescription forgeries; seeking of controlled substances from multiple providers,

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[1] In a managed care delivery system, people get most or all of their Medicaid services from an organization under contract with the state.

[2] Cindy Parks Thomas, PhD, Jeffrey Prottas, PhD, Michael Fischer, MD, MS, *The MassHealth Pharmacy Program Implementation Report* (November 2009).

known as "doctor shopping"; theft; and sharing of prescriptions with others who have not been prescribed the drug in question. The cost of drug diversion to health insurers has been estimated at $72.5 billion by the Coalition against Insurance Fraud. [3]

The Commonwealth has taken a number of significant measures to prevent drug diversion. Most recently, on August 18, 2012, the Legislature enacted Chapter 244 of the Acts of 2012, An Act Relative to Prescription Drug Diversion, Abuse and Addiction. The requirements established by this statute include the following:

- All practitioners who prescribe controlled substances must participate in DPH's prescription-monitoring program.

- MassHealth must establish a controlled substance management program. (MassHealth has since established this program, which monitors members who fill 11 prescriptions of Schedule II, III, or IV controlled substances from four or more prescribers or at four or more pharmacies within 90 days.)

- Pharmacies can only fill prescriptions for narcotics from the New England states and New York.

- When a pharmacy or drug manufacturer discovers a drug theft that must be reported to the U.S. Drug Enforcement Administration, the pharmacy or manufacturer must also report the theft to city and/or state police.

- Narcotic prescriptions must be written on secure, tamper-proof prescription pads already in use for Medicare and Medicaid patients.

MassHealth has also instituted controls to limit drug diversion, including the following:

- Members are required to show identification when receiving a prescription from a pharmacy.

- All prescriptions for narcotic analgesics require written hardcopy prescriptions and cannot be called in, faxed, or e-mailed to the pharmacy. No refills are allowed for this type of drug.

- MassHealth creates a monthly record detailing trends such as the most frequently prescribed drugs and the pharmacies filling the most prescriptions.

As with any government program, the confidence of the public is essential to the Pharmacy Program's success and continued support. To maintain the public's confidence in the Pharmacy

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[3] Coalition Against Insurance Fraud, *Prescription for Peril,* Dec. 2007, http://www.insurancefraud.org/prescription-for-peril.htm

Program, MassHealth must have effective controls such as regulations that reflect best industry practices and policies and procedures in place to ensure that members receive only medically necessary prescription drugs and that claims for such prescription drugs are processed in accordance with all applicable state and federal laws and regulations.

Highlight of Audit Findings

MassHealth's Data Warehouse does not contain all the information necessary to effectively review the Pharmacy Program. Specifically, the Data Warehouse, which is MassHealth's central repository for provider claims, does not always identify the prescribing provider or the prescribed medication associated with certain prescription drug claims. In addition, the Data Warehouse contains inaccurate information about the allowed number of refills of a prescription drug that members may receive. Without complete and accurate claims information, independent reviewers of the Pharmacy Program cannot effectively identify trends and anomalies indicative of billing irregularities and potentially fraudulent activities.

Recommendations of the State Auditor

MassHealth should improve the completeness and accuracy of claims information within the Data Warehouse by adding a data field to capture the prescribing provider's National Provider Identification number, identifying compound drugs with a descriptor (e.g., "Compound"), and ensuring that controls are in place to properly document the allowable number of prescribed refills for controlled drugs.

OVERVIEW OF AUDITED AGENCY

Medicaid is a joint federal-state program created by the U.S. Congress in 1965 as Title XIX of the Social Security Act. At the federal level, the Centers for Medicare & Medicaid Services (CMS), within the U.S. Department of Health and Human Services, is an agency that administers the Medicare program and works in partnership with state governments to administer their Medicaid programs. Each state administers its Medicaid program in accordance with its CMS-approved state plan. States have considerable flexibility in designing and operating their Medicaid programs, but must comply with applicable federal requirements.

The Massachusetts Executive Office of Health and Human Services (EOHHS) administers the state's Medicaid program, known as MassHealth, under Chapter 118E of the Massachusetts General Laws. MassHealth provides access to healthcare services, including pharmacy services, to approximately 1.3 million eligible low- and moderate-income recipients. EOHHS fulfills its statutory responsibility through the Office of Medicaid.

In fiscal year 2011, the Massachusetts Medicaid program paid more than $11.1 billion to healthcare providers, of which approximately 60%[4] was federally funded. As shown in the following chart, for the two-year period ended June 30, 2011, MassHealth paid over 25 million claims for prescription drugs, totaling over $1 billion. The majority of these prescription drugs were prescribed by physicians, nurse practitioners, and dentists.

Prescriber	Fiscal Year 2010		Fiscal Year 2011		Total	
	Claims	Amount Paid	Claims	Amount Paid	Claims	Amount Paid
Physicians	8,156,692	$326,589,900	8,610,993	$330,323,777	16,767,685	$ 656,913,677
Nurse Practitioners	454,352	20,393,531	570,016	27,800,297	1,024,368	48,193,828
Dentists	134,313	698,776	105,388	499,625	239,701	1,198,401
Others (e.g., optometrists, podiatrists)	3,719,528	156,438,869	3,746,573	150,785,167	7,466,101	307,224,036
Totals	12,464,885	$504,121,076	13,032,970	$509,408,866	25,497,855	$1,013,529,942

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[4] Under the American Recovery and Reinvestment Act of 2009, Massachusetts's Federal Matching Assistance Percentage was temporarily increased from 50% to 60% for fiscal year 2011.

AUDIT SCOPE, OBJECTIVES, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) conducted an audit of pharmacy claims paid during the period July 1, 2009 through June 30, 2011. We conducted this performance audit in accordance with generally accepted government auditing standards, except for the scope limitation noted below. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our objectives were to (a) evaluate MassHealth's internal controls over the MassHealth Pharmacy Program; (b) determine whether pharmacies billed for and dispensed prescription drugs in accordance with MassHealth regulations; and (c) identify any trends and/or anomalies in claims data to identify pharmacies, physicians, and members who may warrant further investigation.

To achieve our audit objectives, we reviewed applicable state and federal laws, rules, and regulations. We evaluated the Pharmacy Program's internal controls over claims processing by testing a random sample of 40 claims to ensure that system edits functioned as described by MassHealth officials. We also reviewed MassHealth's monitoring of prescribing providers, dispensing pharmacies, members, and the actions taken by MassHealth to correct identified problems. We queried all Schedule II (i.e., drugs that cannot have prescribed refills) pharmacy claims information from the Massachusetts Medicaid Management Information System and MassHealth's Data Warehouse for the two-year period ended June 30, 2011 and analyzed this data to identify (1) the type, frequency of prescription, and cost of prescription drugs and (2) trends and anomalies indicative of systemic billing problems and potential instances of fraud and abuse. We assessed internal controls and identified a subset of key controls that we tested to determine the effectiveness of procedures used by the Pharmacy Program to control and monitor the payment of prescription drugs. The key controls tested included those for authorizing, accessing, and monitoring prescriptions for pharmaceuticals that have the highest potential for abuse. Although these controls appear to be functioning properly, we determined the risk to be moderate to high based on the inherent risks associated with drug diversion, which is a national concern, and the high volume of transactions within the Pharmacy Program. The moderate to high risk determination supports the sample size and the testing that was

conducted. We also consulted with officials from MassHealth and OSA's Bureau of Special Investigations, which is responsible for investigating fraud within the Commonwealth's Medicaid program.

We attempted to determine the physicians and pharmacies that prescribed and dispensed the largest quantity of prescription drugs for members. However, we identified a scope limitation that prevented us from making this determination. Specifically, the Data Warehouse, which is MassHealth's central repository for provider claims, does not identify the prescribing provider and the prescribed medication associated with certain prescription drug claims. In addition, the Data Warehouse contains inaccurate information about the allowed number of prescription refills of a prescription drug that members may receive. Because of these factors, our ability to analyze claims and identify trends and anomalies related to prescriptions for pharmaceuticals that have the highest potential for abuse was limited.
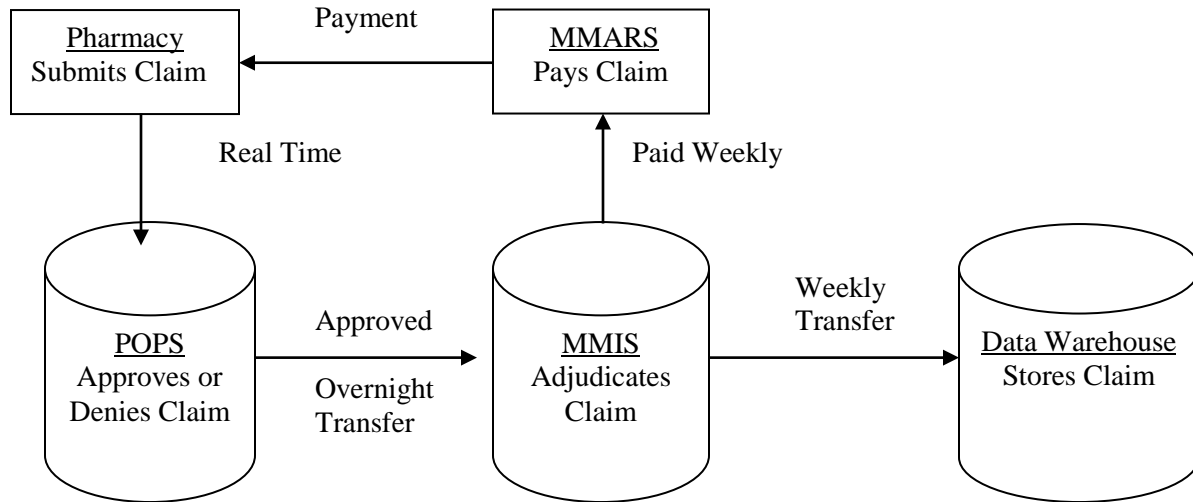
AUDIT FINDINGS

MASSHEALTH NEEDS TO EXPAND PHARMACY CLAIMS DATA WITHIN THE DATA WAREHOUSE

Our audit found that MassHealth's Data Warehouse does not contain all of the information necessary to effectively review the Pharmacy Program. Specifically, the Data Warehouse, which is MassHealth's central repository for provider claims, does not identify the prescribing provider and/or the prescribed medication associated with certain prescription drug claims. In addition, the Data Warehouse contains inaccurate information about the allowed number of prescription refills of a prescription drug that members may receive. Without complete and accurate claims information, independent reviewers of the Pharmacy Program cannot identify trends and anomalies indicative of billing irregularities and potential fraudulent activities.

The processing cycle for pharmacy claims involves the capture, review, and transfer of information through four separate data systems. Pharmacists initiate the claims process by entering a claim in the Pharmacy Online Processing System (POPS), which MassHealth uses to approve or deny pharmacy claims in real time. Both approved and denied claims are electronically transferred from POPS to the Medicaid Management Information System (MMIS), which adjudicates approved claims and initiates their payment through the Massachusetts Management and Accounting Reporting System (MMARS). MMARS processes pharmacy claims weekly. Pertinent information related to both paid and denied claims is transferred from MMIS and stored within the Data Warehouse. The Data Warehouse is the source from which all pharmacy claims can be queried and analyzed by independent reviewers, including the Office of the State Auditor (OSA), to identify trends and anomalies that may warrant further investigation. The flowchart below depicts the flow of pharmacy claims information through these systems.

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┌──────────────┐        Payment        ┌──────────────┐
│  Pharmacy    │ ◄──────────────────── │    MMARS     │
│ Submits Claim│                       │  Pays Claim  │
└──────────────┘                       └──────────────┘
       │                                      ▲
       │ Real Time                            │ Paid Weekly
       ▼                                      │
   ╭────────╮          Approved          ╭────────╮       Weekly       ╭────────╮
   │        │ ────────────────────────►  │        │      Transfer      │        │
   │  POPS  │                            │  MMIS  │ ─────────────────► │  Data  │
   │Approves or│        Overnight        │Adjudicates│                 │Warehouse│
   │ Denies Claim│      Transfer         │  Claim   │                  │Stores Claim│
   ╰────────╯                            ╰────────╯                    ╰────────╯
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During the audit, we analyzed pharmacy claims stored within the Data Warehouse to determine providers who had prescribed the most commonly abused opioids (e.g., Oxycontin, Vicodin, Percocet) and other oxycodone products. We found that the Data Warehouse did not contain the information necessary to effectively and efficiently identify trends and anomalies within this class of prescription drugs. Specifically, we found that the Data Warehouse (a) did not contain sufficient identification information on prescribing providers and prescription drugs and (b) inaccurately reflected information on the number of refills allowed, as discussed below.

a. Insufficient Information on Prescribing Providers and Prescription Drugs

During the audit period, MassHealth paid 1,259,226 claims, totaling $66,575,674, for Schedule II pharmaceuticals. Schedule II pharmaceuticals are defined under the U.S. Controlled Substances Act[5] as follows:

- *The drug or other substance has a high potential for abuse.*

- *The drug or other substance has a currently accepted medical use in treatment in the United States or a currently accepted medical use with severe restrictions.*

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[5] The Controlled Substances Act, which was enacted into law by the U.S. Congress as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, is the federal U.S. drug policy under which the manufacture, importation, possession, use, and distribution of certain substances is regulated.

- *Abuse of the drug or other substances may lead to severe psychological or physical dependence.*

As previously noted, the Data Warehouse stores information on all pharmacy claims, including claims submitted for Schedule II pharmaceuticals. This stored information includes, among other data elements, (1) the claim and prescription numbers; (2) the name and identification number of the prescribing provider, billing provider, member, and prescription drug; and (3) the number of allowed prescription refills. However, we found that, in certain instances, the prescribing provider's name and identification number were represented within the Data Warehouse by dash symbols (-). In addition, the drug name and identification number were, at times, represented by pound signs (#). The table below details the instances in which the prescribing provider and drug information was represented by these symbols for all prescribed drugs as well as Schedule II pharmaceuticals during the audit period.

Data Warehouse Symbol	Fiscal Year 2010		Fiscal Year 2011		Total Claims	Total Amount Paid
	Number of Paid Claims	Amount Paid	Number of Paid Claims	Amount Paid		
ALL PRESCRIBED PHARMACEUTICALS						
(-)	3,568,711	$148,410,220	3,572,735	$142,232,943	7,141,446	$290,643,163
(#)	27,985	$1,643,587	28,919	$1,501,408	56,904	$3,144,995
(-) and (#)	5,650	$287,219	5,259	$291,831	10,909	$579,050
SCHEDULE II PHARMACEUTICALS						
(-)	191,219	$10,729,914	189,864	$10,674,767	381,083	$21,404,681

(-) Representation for prescribing provider name and identification number
(#) Representation for drug name and identification number

When we first identified this situation, MassHealth was unable to explain its rationale for using dash and pound signs to represent the name and identification numbers of prescribing providers and prescription drugs. However, after investigating this matter, MassHealth determined that members, at times, obtain their medications from physicians and nurse practitioners who are not MassHealth-enrolled providers. Because these providers do not have an assigned MassHealth identification number, the Data Warehouse populates the prescribing provider name and identification number fields with dashes.

Although certain prescribing providers may not have a MassHealth identification number, all prescribing providers have a National Provider Identification number (NPI), which is a unique 10-digit identification number issued to healthcare providers in the United States by the Centers for Medicare and Medicaid Services. All prescribers must submit a valid NPI with each prescription. MassHealth captures the NPI within POPS and uses it to validate the authenticity of prescriptions. However, MassHealth does not transfer the NPI information to the Data Warehouse. Consequently, for certain pharmacy claims, the Data Warehouse has neither a MassHealth identification number nor an NPI.

In addition, the Data Warehouse includes a data field for the National Drug Code (NDC), which is a unique product identifier used in the United States for drugs intended for human use. However, as previously noted, we found 56,904 claims during the audit period in which the NDC was represented as a pound sign within the Data Warehouse. After investigating this matter, MassHealth explained that pound signs are used in the Data Warehouse to identify compound drugs prescribed for members. Compound drugs are pharmaceutical products created to fit the unique needs of a patient and may be prescribed to avoid a nonessential ingredient that may cause an allergic reaction, to obtain the exact dose needed, or to change the form of the medication from a solid pill to a liquid. Since a compound drug includes several ingredients, each of which has its own NDC, a single NDC could not be attached to a compound; therefore, pound signs were used as a default identifier for these drugs.

b. **Allowed Number of Refills Inaccurately Represented within the Data Warehouse**

We also found that the Data Warehouse contained inaccurate information within the "Allowed Number of Refills" data field. Chapter 94C, Section 23(b), of the Massachusetts General Laws prohibits physicians from writing prescriptions that include refills of Schedule II drugs, as follows:

> *A written prescription for a controlled substance in Schedule II shall not be refilled and shall be kept in a separate file.*

However, the Data Warehouse indicated that physicians wrote member prescriptions for Schedule II drugs that provided for multiple refills. When we brought this matter to MassHealth's attention, we were informed that the Data Warehouse should have indicated

zero allowed refills for Schedule II drugs. Further, MassHealth explained that although POPS had the correct information about allowed prescription refills, this information was not transferred to MMIS or the Data Warehouse. As a result, MassHealth populated the "Allowed Number of Refills" field in the Data Warehouse with a default value of "five" for all prescription drugs.

Recommendation

MassHealth should improve the completeness and accuracy of claims information within the Data Warehouse by adding a data field to capture the prescribing provider's NPI number; identifying compound drugs with a descriptor (e.g., "Compound"); and transferring the "Allowed Number of Refills" data from POPS to both MMIS and the Data Warehouse for all prescription drug claims.

Auditee's Response

The Massachusetts Executive Office of Health and Human Services (EOHHS) provided the following response to these issues:

> *The Data Warehouse (DW) currently captures the NPI numbers of all MassHealth-enrolled providers. However, MassHealth members who have primary insurance in addition to MassHealth, such as Medicare, may obtain prescriptions from providers who are not enrolled as MassHealth providers. Currently, the DW cannot access non-enrolled MassHealth providers' NPIs, which explains why some claims appeared with a "-"(dash) symbol in the provider fields when the Auditors accessed the data. MassHealth is in the process of evaluating the options for updating its systems to ensure that all NPIs are captured in the Data Warehouse, which we agree will further our program integrity efforts.*

> *In the interim, until all prescribing provider NPIs are captured in the Data Warehouse, upon the OSA's request, MassHealth will generate reports that provide prescribing provider NPIs using the POPS (Pharmacy Online Processing System) reporting tool.*

> *Regarding the DW's identification of certain drugs, MassHealth believes our current process is consistent with the recommendation in the Audit Report that compound drugs be flagged with an identifying description. As the Audit Report notes, compound drugs are comprised of multiple ingredients, and do not have a single unique National Drug Code (NDC) identifier. Rather, the DW identifies these claims with a "#" (hash) symbol as the default identifier for compounded drugs. We believe that there is no need to substitute the word "compound" for the "#" symbol. MassHealth will include a description of "#" and any other symbol in the accessible frequently asked questions (FAQs) menu . . . .*

> *MassHealth does not currently rely on the "Allowed Number of Refills" field in the DW. This field is supplied by the national drug information data base service MassHealth*

purchases and subscribes to, and cannot be modified by MassHealth. As a result, the default figure of "5" appears in this field in the DW.

MassHealth does track the authorized number of refills to ensure that member prescriptions for Schedule II drugs do not allow for refills. MassHealth relies upon the pharmacy online processing system (POPs) to ensure the accuracy of the prescription refill information. Using POPs, MassHealth has a record of the number of refills both authorized and filled for every prescription. POPs sends the "Number of Refills" to the DW. The "Number of Refills" field is an attribute of the actual prescription record of the paid claim and records a particular refill of the prescription. For example, if the prescriber allows 5 refills and the claim being examined is the third refill, the "Number of Refills" field will read "3." In addition, the POPs also captures the "Number of Refills Authorized," which reflects the true number of refills designated by the prescriber for that prescription (in the example above that field would read "5," while for all Schedule II drugs, the field would read "0"). While the "Number of Refills Authorized" field is not imported into the DW, MassHealth has a record of the number of refills authorized for each prescription in POPs. MassHealth is in the process of evaluating the options for updating its systems to ensure that "Number of Refills" are captured in the Data Warehouse, which we agree will further our program integrity efforts.

In the interim, until all "Number of Refills" are captured in the Data Warehouse, upon the OSA's request, MassHealth will generate reports that provide this information using our POPS (Pharmacy Online Processing System) reporting tool.

Auditor's Reply

According to its response, EOHHS is planning to update its systems to ensure that all prescribing provider NPIs and the numbers of authorized refills are captured in the Data Warehouse. Once updated, EOHHS's systems will provide outside auditors and other reviewers with the information necessary to effectively analyze prescribing providers' claims, including the number of refills they prescribe for members. In addition, while we recommended that EOHHS identify compound drugs with a descriptor (e.g., "Compound") within the Data Warehouse, EOHHS's alternative solution to add a description of the "#" symbol and other symbols within its Frequently Asked Questions menu will provide outside users of the Data Warehouse with an understanding of these symbols and help facilitate their analysis of pharmacy claims. Overall, EOHHS's willingness to collaborate with OSA in resolving these data problems should serve to enhance the integrity of its Pharmacy Program.