Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

PUBLIC SUMMARY REPORT: INFORMATION TECHNOLOGY CONTROL WEAKNESSES FOUND AT THE COMMONWEALTH OF MASSACHUSETTS' MEDICAID MANAGEMENT INFORMATION SYSTEM

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Office of Inspector General

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OFFICE OF AUDIT SERVICES FINDINGS AND OPINIONS

The designation of financial or management practices as questionable, a recommendation for the disallowance of costs incurred or claimed, and any other conclusions and recommendations in this report represent the findings and opinions of OAS. Authorized officials of the HHS operating divisions will make final determination on these matters.

Massachusetts did not ensure that it adequately protected its Medicaid data and information systems to reduce vulnerabilities that could have potentially compromised the integrity of the Medicaid program.

This summary report provides an overview of the results of our audit of the information security controls at Massachusetts's Executive Office of Health and Human Services, which is responsible for administering the State Medicaid program (MassHealth). It does not include specific details of the vulnerabilities that we identified because of the sensitive nature of the information. We have provided more detailed information and recommendations to MassHealth so that it can address the issues we identified. The findings listed in this summary report reflect a point in time regarding system security and may have changed since we reviewed these systems.

WHY WE DID THIS REVIEW

The U.S. Department of Health and Human Services (HHS) oversees States' use of various Federal programs, including Medicaid. State agencies are required to establish appropriate computer system security requirements and conduct biennial reviews of computer system security used in the administration of State plans for Medicaid and other Federal entitlement benefits (45 CFR § 95.621). This review is one of a number of HHS, Office of Inspector General, reviews of States' computer systems used to administer HHS-funded programs.

The Massachusetts Executive Office of Health and Human Services is responsible for administering MassHealth. MassHealth has service-level agreements with the Massachusetts Office of Information Technology to maintain, support, and provide information technology (IT) architecture services. MassHealth contracts with Hewlett-Packard for application support. The Medicaid Management Information System (MMIS) mainly supports Medicaid claims processing, recovery of claims' reimbursement from third parties, managed care, the provider self-service portal, and health care authorization services. The MMIS supports more than 1.67 million beneficiaries, and processed approximately \$13.8 billion in fiscal year 2015.

The objective of our review was to determine whether Massachusetts safeguarded MMIS data and supporting systems in accordance with Federal requirements.

HOW WE CONDUCTED THIS REVIEW

We focused our audit on MassHealth's Web sites, databases, and other supporting information systems. We reviewed MassHealth's implementation of Federal requirements and National Institute of Standards and Technology guidelines within the following areas: system security plan, risk assessment, data encryption, Web applications, vulnerability management, and database applications. We limited our review to these security control areas and to controls that were in place at the time of our site visit. We did not review MassHealth's internal controls.

We conducted the performance audit described here in accordance with generally accepted government auditing standards. 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. We communicated to MassHealth our preliminary findings in advance of issuing our draft report.

WHAT WE FOUND

MassHealth did not safeguard MMIS data and supporting systems in accordance with Federal requirements. Specifically, MassHealth had vulnerabilities related to security management, configuration management, system software controls, and Web site and database vulnerability scans.

Although we did not identify evidence that the vulnerabilities had been exploited, exploitation could have resulted in unauthorized access to, and disclosure of, sensitive information, as well as disruption of operations critical to MassHealth. As a result, the vulnerabilities were collectively and, in some cases, individually significant and could have potentially compromised the confidentiality, integrity, and availability of MassHealth's MMIS. These vulnerabilities existed because MassHealth did not implement sufficient controls over its Medicaid data and information systems.

WHAT WE RECOMMENDED

We recommended that MassHealth implement our detailed recommendations to address the findings that we identified related to security management, configuration management, system software controls, and Web site and database vulnerability scans.

AUDITEE COMMENTS

In written comments on our draft report, MassHealth did not explicitly express concurrence or noncurrence with our eight recommendations; however, it described corrective actions that it had taken or planned to take to remediate all the vulnerabilities. MassHealth questioned the number of computers associated with one finding. MassHealth did not provide supporting documentation to dispute our analysis.