Audit Report

Department of Health and Mental Hygiene
Regulatory Services

June 2014

OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

Karl S. Aro
Executive Director

Thomas J. Barnickel III, CPA
Legislative Auditor

June 19, 2014

Senator James C. Rosapepe, Co-Chair, Joint Audit Committee
Delegate Guy J. Guzzone, Co-Chair, Joint Audit Committee
Members of Joint Audit Committee
Annapolis, Maryland

Ladies and Gentlemen:

We have audited Regulatory Services, a budgetary unit within the Department of Health and Mental Hygiene (DHMH), for the period beginning August 3, 2010 and ending March 24, 2013. Regulatory Services consists of the following entities:

- Health Professional Boards and Commission (comprised of 17 separate boards and 1 commission)
- Board of Nursing
- Board of Physicians
- Office of Health Care Quality (OHCQ)

These entities are responsible for licensing and regulating health professionals (such as physicians, nurses, and pharmacists) and health care facilities in the State.

Our audit disclosed that certain boards had not established adequate control over cash receipts. We also noted that certain health care facilities were not inspected by OHCQ as required. For example, OHCQ had not performed inspections for 757 of the 1,364 (55 percent) licensed assisted living facilities during fiscal year 2012. Finally, we noted that one board did not have a disaster recovery plan for its computer systems and certain database controls were not sufficient.

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DHMH's response to this audit, on behalf of Regulatory Services, is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during the course of this audit by Regulatory Services.

Respectfully submitted,

Thomas J. Barnickel III, CPA
Legislative Auditor

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***Denotes item repeated in full or part from preceding audit report**

Background Information

Agency Responsibilities

Regulatory Services is a separate budgetary unit within the Department of Health and Mental Hygiene consisting of

- Health Professional Boards and Commission (comprised of 17 separate boards and 1 commission),
- Board of Nursing,
- Board of Physicians, and
- Office of Health Care Quality (OHCQ).

The various boards and commission are responsible for licensing and regulating health professionals (such as physicians, nurses, and pharmacists) in the State. OHCQ is responsible for regulating health care facilities. According to the State's records, fiscal year 2013 expenditures for Regulatory Services totaled approximately $44.9 million.

Organizational Change

Chapter 667, Laws of Maryland 2012, effective July 1, 2012, renamed the State Board of Environmental Sanitarians to be the State Board of Environmental Health Specialists and transferred the Board from the Department of the Environment to the Department of Health and Mental Hygiene. The law also established a special fund related to this Board. The scope of our audit of Regulatory Services includes the activities of this Board beginning July 1, 2012. Activities prior to July 1, 2012 are included in the scope of our audit of the Department of the Environment.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the four findings contained in our preceding audit report dated November 7, 2011. We determined that Regulatory Services satisfactorily addressed one of these findings. The remaining three findings are repeated in this report.

Findings and Recommendations

Cash Receipts

Finding 1
Certain boards did not adequately control and account for collections.

Analysis
At the three boards reviewed, adequate controls over collections had not been established. According to Department of Health and Mental Hygiene (DHMH) records, during fiscal year 2013, collections for the three boards totaled approximately $24.3 million, including $12 million at the Board of Physicians, $8.5 million at the Board of Nursing, and $3.8 million at the Board of Pharmacy. Our review disclosed the following conditions:

- The Board of Nursing did not immediately restrictively endorse and log checks received by mail for certified nursing assistant licenses. Multiple Board employees handled the checks prior to endorsement and logging. In addition, 23 employees had access to the location where collections were stored overnight until processing the next business day. The Board also did not verify that collections were deposited in the State's bank account and that certain credit card receipts were properly recorded in the State's accounting records. The lack of adequate deposit verifications by certain boards has been commented upon in our audit reports dating back to 2002.

- The Board of Physicians did not verify that all collections were properly recorded in the State's accounting records. The Board also did not prepare bank reconciliations of lockbox receipts deposited to its account with receipts posted to the State's bank account in a timely manner. According to the Board's records, lockbox receipts totaled $3.7 million during fiscal year 2013. Specifically, 26 of the 33 monthly bank reconciliations for July 2010 to March 2013 were prepared 81 to 763 days after the end of the month. In addition, we noted that 16 of the late reconciliations were prepared during a two-week period in March and April 2013. Furthermore, none of the reconciliations were reviewed and approved by supervisory personnel. Consequently, errors or other discrepancies could occur without timely detection. According to the bank, the agency has 60 days from the end of the statement period to dispute transactions.

- In response to our preceding audit report, the Board of Pharmacy began performing periodic reconciliations of the value of its licenses issued with the related collections. However, this process was discontinued in October 2012 when the Board implemented its new automated licensing system. We were

advised that the Board is working to develop the appropriate system reports to facilitate the reconciliation. The lack of such reconciliations by the Board has been commented upon in our audit reports dating back to 2006.

Recommendation 1
We recommend that the applicable Boards

a. immediately log and restrictively endorse all checks received and limit employee access to collections prior to deposit,
b. independently verify that all recorded collections are deposited and recorded in the State's accounting records (repeat),
c. prepare bank reconciliations in a timely manner and ensure that the reconciliations are reviewed and approved by supervisory personnel, and
d. reconcile licenses issued to fees collected (repeat).

Health Care Facility Inspections

Finding 2
The Office of Health Care Quality (OHCQ) had not conducted annual inspections of certain health care facilities as required.

Analysis
OHCQ had not inspected certain heath care facilities as required. Specifically, for fiscal year 2012, OHCQ had not performed inspections for 757 of the 1,364 (55 percent) licensed assisted living facilities nor inspected 143 of the 197 (73 percent) facilities for the developmentally disabled. Similar situations have been commented upon in DHMH reports dating back to 2004 and in our preceding audit report for Regulatory Services. OHCQ advised us that an increasing workload, combined with reductions in staff, have caused the delays in performing required inspections and it recently implemented a strategic planning process to more effectively and efficiently comply with its regulatory requirements.

OHCQ is required to conduct inspections of these facilities at least annually to ensure facility compliance with State and federal regulations regarding patient care and safety. When problems or deficiencies are noted, OHCQ initiates administrative action against facilities that violate rules and regulations. If a facility fails to correct problems, OHCQ may impose sanctions such as license revocation, fines, or other restrictions on the operating license.

Recommendation 2
We recommend that OHCQ complete inspections of the various health care facilities, as required by law (repeat).

Information Systems Security and Control

Background

Fourteen boards and one commission have licensing systems maintained by the Health Professional Boards and Commission's information technology staff on a consolidated licensing application database system. The remaining five boards maintain licensing systems residing on servers located at each board's office and principally utilize application security to provide system security. Additionally, several boards provide an online license verification service to the general public and numerous boards offer online license renewals.

Our audit of these systems was limited to the review of select database system controls for the Board of Physicians, the Board of Nursing, and the Health Professional Boards and Commission's consolidated licensing database. Our audit also included the review of certain other general controls (such as file backup procedures and disaster recovery planning) for the Board of Nursing.

In addition, the Board of Nursing has contracted with an information technology vendor for a document imaging system and an online web-based application required for nursing license renewals and related application processing. The vendor provides support for the Board's system and computer applications along with maintenance of data records residing on the Board's in-house databases. These databases contain certain sensitive personal information such as social security numbers of licensees.

Finding 3
The Board of Nursing did not have a complete disaster recovery plan, did not protect sensitive personally identifiable information, and did not properly monitor its licensing database.

Analysis

The Board of Nursing did not have a complete disaster recovery plan (DRP), did not protect sensitive personally identifiable information, and did not properly monitor its licensing database.

- The Board did not have a complete information technology DRP for recovering from disaster scenarios. For example, the DRP did not address alternate site processing arrangements, prioritization of systems for recovery, and restoration of network connectivity nor had the plan been tested. Without a complete DRP which has been successfully tested, a disaster (such as a fire) could cause significant delays (for an undetermined period of time) in restoring information systems operations above and beyond the expected

delays that would exist in a planned recovery scenario. This condition was commented upon in our preceding audit report.

- Weekly, the Board transferred an unencrypted copy of its entire licensing database to its document imaging vendor. In addition, the userid and password used to connect to the vendor for this transfer were not encrypted. As a result of these conditions, sensitive information (full name and social security numbers) applicable to over 448,000 individuals was susceptible to unauthorized disclosure. This sensitive personal information is commonly sought by criminals for use in identity theft, and therefore should be protected by appropriate information system security controls. In this regard, the Department of Information Technology's *Information Security Policy* requires that encryption be utilized to protect confidential information when it is transmitted.

- Auditing capabilities were not enabled for the licensing database. Accordingly, activities related to the security of data were not collected and analyzed. Examples of database activities which should be logged and analyzed include direct changes to critical data tables and use of certain critical privileges. Therefore, unauthorized or inappropriate activities, affecting the integrity of the production database information, could occur and not be detected by management. A similar condition was commented upon in our two preceding audit reports.

Recommendation 3

We recommend that the Board of Nursing

a. develop a complete DRP that, at a minimum, addresses the basic elements needed for a comprehensive disaster recovery plan and periodically test the plan (repeat);

b. utilize secure protocols for the transmission of the licensing database and authentication credentials; and

c. log all significant database security and audit events (repeat).

Audit Scope, Objectives, and Methodology

We have audited Regulatory Services, a unit of the Department of Health and Mental Hygiene (DHMH), for the period beginning August 3, 2010 and ending March 24, 2013. Regulatory Services consists of the Health Professional Boards and Commission (comprised of 17 separate boards and 1 commission), the Board of Nursing, the Board of Physicians, and the Office of Health Care Quality (OHCQ). The audit was conducted 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.

As prescribed by the State Government Article, Section 2-1221 of the Annotated Code of Maryland, the objectives of this audit were to examine Regulatory Services' financial transactions, records, and internal control, and to evaluate its compliance with applicable State laws, rules, and regulations. We also determined the status of the findings included in our preceding audit report.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. The areas addressed by the audit included health professional and facilities licensing, cash receipts, and information systems.

To accomplish our audit objectives, our audit procedures included inquiries of appropriate personnel, inspections of documents and records, observations of Regulatory Services' operations, and tests of transactions. We also performed various data extracts of pertinent information from the State's Financial Management Information System (such as revenue and expenditure data). The extracts are performed as part of ongoing internal processes established by the Office of Legislative Audits and were subject to various tests to determine data reliability. We determined that the data extracted from these various sources were sufficiently reliable for the purposes the data were used during this audit. We also extracted data from various agency systems, including the licensing systems at the Board of Nursing and the Board of Physicians and the inspection system at OHCQ, for the purpose of testing whether licenses were properly issued and inspections were performed as required. We performed various tests of the relevant data and determined that the data were sufficiently reliable for the purposes the data were used during the audit. Finally, we performed other auditing procedures that we considered necessary to achieve our audit objectives. The reliability of data used in this report for background or informational purposes was not assessed.

Our audit did not include certain support services provided to Regulatory Services by DHMH – Office of the Secretary. These support services (such as payroll, purchasing, maintenance of accounting records, and related fiscal functions) are included within the scope of our audit of the Office of the Secretary.

Regulatory Services' management is responsible for establishing and maintaining effective internal control. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets, and compliance with applicable laws, rules, and regulations are achieved.

Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

Our reports are designed to assist the Maryland General Assembly in exercising its legislative oversight function and to provide constructive recommendations for improving State operations. As a result, our reports generally do not address activities we reviewed that are functioning properly.

This report includes conditions that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect Regulatory Services' ability to maintain reliable financial records, operate effectively and efficiently, and/or comply with applicable laws, rules, and regulations. Our report also includes findings regarding significant instances of noncompliance with applicable laws, rules, or regulations. Other less significant findings were communicated to Regulatory Services that did not warrant inclusion in this report.

The response from DHMH, on behalf of Regulatory Services, to our findings and recommendations is included as an appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise DHMH regarding the results of our review of its response.

APPENDIX

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

June 18, 2014

Mr. Thomas J. Barnickel III, CPA
Legislative Auditor
Office of Legislative Audits
301 West Preston Street
Baltimore, MD 21201

Dear Mr. Barnickel:

Thank you for your letter regarding the draft audit report for the Department of Health and Mental Hygiene – Regulatory Services for the period beginning August 3, 2010 through March 24, 2013. Enclosed you will find the Department's response and plan of correction that addresses each audit recommendation.

I will work with the appropriate Administration Directors, Programs Directors, and Deputy Secretary to promptly address the audit exceptions. In addition, the OIG's Division of Internal Audits will follow-up on the recommendations to ensure compliance.

If you have any questions or require additional information, please do not hesitate to contact me at 410-767-4639 or Thomas V. Russell, Inspector General, at 410-767-5862.

Sincerely,

Joshua M. Sharfstein, M.D.
Secretary

cc: Paula C. Hollinger, Associate Director, Health Workforce, DHMH
Christine Farrelly, Acting Executive Director, State Board of Physicians, DHMH
Patricia A. Noble, R.N., Executive Director, Maryland Board of Nursing, DHMH
Partricia T. Nay, M.D., Director, Office of Health Care Quality, DHMH
LaVerne G. Naesea, Executive Director, Maryland Board of Pharmacy, DHMH
Thomas V. Russell, Inspector General, DHMH
Ellwood L. Hall, Assistant Inspector General, DHMH
Patrick D. Dooley, Chief of Staff & Assistant Secretary for Regulatory Affairs, DHMH

Findings and Recommendations

Finding 1
Certain boards did not adequately control and account for collections.

Recommendation 1
We recommend that the applicable Boards

a. immediately log and restrictively endorse all checks received and limit employees access to collections prior to deposit,
b. independently verify that all recorded collections are deposited and recorded in the State's accounting records (repeat),
c. prepare bank reconciliations in a timely manner and ensure that the reconciliations are reviewed and approved by supervisory personnel, and
d. reconcile licenses issued to fees collected (repeat).

Board of Nursing Response:

a. The Board partially concurs with the finding.

   The Board does not agree that adequate controls and accounting for collections were not in place. During previous OLA audits, the Board was told that our current process for processing the checks and money orders was acceptable because of the large volume of receipts that were required to be processed. Currently, the receipts are batched and taped to the application and reviewed for the required documentation and stored overnight until the processing is complete. This includes logging and restrictively endorsing the receipts.

   The Board concurs that employees access to collections prior to deposits be limited and is currently looking into a secondary log-in security system. The Board has changed the access code for the "locked" room and has reduced the number of employees with access from 23 to 8 individuals. Furthermore, the Board is taking steps to have a secondary key access system installed to ensure that entries and exits are logged. The Board should have the process in place by December 31, 2014.

b. The Board concurs with the recommendation to independently verify that all recorded collections are deposited and recorded in the State's accounting records. All mail-in, walk-in and credit card receipts will now be independently verified to deposit slips and to FMIS.

c. The Board concurs with the recommendation and will prepare bank reconciliations in a timely manner and ensure that the reconciliations are reviewed and approved by supervisory personnel. The Board is currently working with our vendor and the bank to provide the correct time-zone in

order to get the monthly transaction and reconciliation reports to match the bank statement.

d. Not applicable to Board of Nursing

Board of Pharmacy Response:

a. This recommendation does not apply to the Board of Pharmacy.
b. This recommendation does not apply to the Board of Pharmacy.
c. This recommendation does not apply to the Board of Pharmacy.
d. The Board concurs with this finding and recommendation. The Board recently implemented an interim plan to reconcile licenses issued with fees collected, while permanent configurations are made to its MIS system. Since the audit, MIS staff completed training on preparing reports using a software application compatible with the new MIS system that allows the preparation of custom reports. After the training, a manual process was developed and tested to determine the total value of licenses issued vs. the related collections. The interim process, implemented in April 2014, involves two separate reports that are reconciled bimonthly. The first report, generated from the Board's fiscal unit, reflects fees received. The second report generated by the licensing unit, reflects licenses issued. Reconciling the two reports allows the Board to determine which paid fees have not had corresponding licenses issued. The Board then performs a review to learn why a license may not have been issued, assure appropriate staff processing, and meet audit compliance requirements.

Board of Physicians Response:

a. This recommendation does not apply to the Board of Physicians.
b. The Board of Physicians concurs with this recommendation. Effective August 21, 2013, deposit verifications are performed for mail-in collections received by the Board, as required. Deposit verification to the initial record of cash receipts and the State's accounting records are now being performed by independent employees of the cash receipts function.
c. The Board concurs. All bank reconciliations will be performed, reviewed, and approved by supervisory personnel in a timely fashion and brought up to date for FY2014 by December 31, 2014.
d. This recommendation does not apply to the Board of Physicians.

Finding 2
The Office of Health Care Quality (OHCQ) had not conducted annual inspections of certain care facilities as required.

Recommendation 2
We recommend that OHCQ complete inspections of the various health care facilities, as required by law (repeat).

OHQC Response

The OHCQ concurs with the findings of the auditors and their recommendation. As previously stated, the OHCQ is unable to meet the inspection requirements due to a shortage of personnel. In the 2013 Annual Report and Staffing Analysis, the OHCQ estimated that 67.9 more surveyors would be needed in order to fulfill these requirements. To address these concerns with limited resources, in January 2013, the OHCQ implemented a strategic planning process that included an evidence-based review of our survey protocols in the context of the statutory and regulatory requirements. One of our broad organizational goals is regulatory efficiency, that is, how to best use our limited resources to fulfill our mission. We are continually striving to protect the health and safety of vulnerable populations while efficiently and effectively utilizing our limited resources.

Interventions Related to Regulatory Efficiency
Specific interventions related to regulatory efficiency in both the assisted living and developmental disabilities units were developed. For example, we reviewed the frequency and content of surveys, developed targeted surveys and combined multiple types of surveys into one on-site visit, etc.

Targeted Surveys
From our evidence-based analysis of the survey process, both of these units developed targeted surveys that meet all statutory and regulatory requirements. These focused surveys allow OHCQ to make best use of its resources while continuing to ensure the safety and quality of health care services for Marylanders. The new surveys have been piloted and were fully implemented in January 2014.

Additional Staff
Despite the gains made through interventions related to regulatory efficiency and targeted surveys, the OHCQ will not be able to conduct the mandated annual surveys of all of these providers. Therefore, new surveyor positions have been requested and received for these two units as part of OHCQ's FY 15 budget.

Summary

The interventions that are described above have allowed the OHCQ to better fulfill our mission to protect the health and safety of Maryland's citizens. The OHCQ is now better able to comply with the regulatory requirements as mandated by the legislature. While progress has been made, there is a need for an on-going strategic planning and quality improvement process that continually examines the Agency's regulatory efficiency. The OHCQ will continue to look for efficient and cost-effective methods to meet mandated goals, while working to ensure there is public confidence in the health care and community service delivery systems in the State.

Finding 3

The Board of Nursing did not have a complete disaster recovery plan, did not protect sensitive personally identifiable information, and did not properly monitor its licensing database.

Recommendation 3

We recommend that the Board of Nursing

a. develop a complete DRP that, at a minimum, addresses the basic elements needed for a comprehensive disaster recovery plan and periodically test the plan (repeat);

b. utilize secure protocols for the transmission of the licensing database and authentication credentials; and

c. log all significant database security and audit events (repeat).

Board of Nursing Response

a. The Board concurs with the recommendation. Effective January 31, 2014, the Board has developed a complete DRP that addresses the basic elements needed for a comprehensive disaster recovery plan and periodically tests the plan.

b. The Board concurs with recommendation. The Board felt that since it was zipping, plus using intrusion detection, and had not received any reports of compromised data, that the data was secure, and that it was ensuring the ability to reconstruct our database if a disaster occurred. However, the Board has since taken the additional steps of enabling encryption of the compressed database dump files prior to transmission. Effective August 16, 2013, the encryption software now meets all of the requirements to ensure that the Board or its vendor could restore the licensure database.

c. Effective January 31, 2014, the Board logs all significant database security and audit events. Specifically, the Board moved the audit trail log from inside the database to a file on the local drive, allowing for backup each day.

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