Official Audit Report – Issued August 12, 2015

Department of Youth Services
For the period July 1, 2012 through June 30, 2014
August 12, 2015

Commissioner Peter J. Forbes
Department of Youth Services
600 Washington Street, Fourth Floor
Boston, MA 02111

Dear Commissioner Forbes:

I am pleased to provide this performance audit of the Department of Youth Services. This report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, July 1, 2012 through June 30, 2014. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

I would also like to express my appreciation to the Department of Youth Services for the cooperation and assistance provided to my staff during the audit.

Sincerely,

Suzanne M. Bump
Auditor of the Commonwealth

cc: Marylou Sudders, Secretary, Executive Office of Health and Human Services
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<th>Description</th>
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<tr>
<td>BCP</td>
<td>business-continuity plan</td>
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<tr>
<td>BOG</td>
<td>Bridging the Opportunity Gap</td>
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<td>CES</td>
<td>Collaborative for Educational Services</td>
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<tr>
<td>CommCorp</td>
<td>Commonwealth Corporation</td>
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<td>DESE</td>
<td>Department of Elementary and Secondary Education</td>
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<td>DYS</td>
<td>Department of Youth Services</td>
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<td>EOHHS</td>
<td>Executive Office of Health and Human Services</td>
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<td>ICP</td>
<td>internal control plan</td>
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<td>ICQ</td>
<td>Internal Control Questionnaire</td>
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<td>ISP</td>
<td>information security plan</td>
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<td>IT</td>
<td>information technology</td>
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<td>JJEMS</td>
<td>Juvenile Justice Enterprise Management System</td>
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<tr>
<td>LEA</td>
<td>local educational agency</td>
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<tr>
<td>OSA</td>
<td>Office of the State Auditor</td>
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<td>OSC</td>
<td>Office of the State Comptroller</td>
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<tr>
<td>PREA</td>
<td>Prison Rape Elimination Act</td>
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EXECUTIVE SUMMARY

The Department of Youth Services (DYS) is the Commonwealth’s juvenile justice agency that provides various educational, psychological, and health services to juvenile offenders detained or committed to its custody that are aimed at making positive changes to their behavior. During the period of our audit, DYS detained approximately 4,200 youths. As of January 2014, DYS had 717 committed youths, of whom approximately 60% were being supervised in one of DYS’s community-based programs. The remaining youths were under DYS supervision and placed in either a DYS residential treatment facility or a residential program operated by private nonprofit human-service providers under contract with DYS, for periods ranging from three months to several years. In addition to medical, behavioral-health, and substance-abuse services, DYS is responsible for providing youths under its supervision with year-round educational services, which it does through approximately 35 programs that offer general, special, and limited vocational education. In fiscal years 2013 and 2014, DYS’s annual appropriations were approximately $155 million and $160 million, respectively.

The purpose of this audit was to determine whether DYS was properly administering educational services to youths in its custody in accordance with applicable state requirements and to determine whether the implementation of DYS’s new Juvenile Justice Enterprise Management System (JJEMS) had adequately addressed deficiencies in its legacy systems that were detailed in our prior audit report (No. 2008-0512-4T).

Below is a summary of our findings and recommendations, with links to each page listed.

<table>
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<th>Finding 1</th>
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<tr>
<td>Controls over DYS’s user-account management need improvement.</td>
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</table>

1. DYS operates several secure and staff-secure residential programs to provide care and custody for youths on detention awaiting trial and under the jurisdiction of the courts.
2. A committed youth has been committed to DYS custody and is placed either in a secure facility or within a community-based program.
1. DYS should immediately review the status of all active JJEMS users and deactivate access privileges for those who no longer require access and/or are not authorized to have it.

2. DYS should develop and document policies and procedures requiring that its Human Resources Division notify the Executive Office of Health and Human Services’ (EOHHS’s) Information Technology department of any changes in employee status that would warrant a change or deactivation of JJEMS access privileges. These policies and procedures should also include requiring periodic (e.g., quarterly) reviews of user access lists to ensure that specific access privileges are appropriate and up to date.

3. DYS should establish and implement controls to ensure that a process is in place to communicate required information to enable personnel to understand and carry out their internal control responsibilities.

Mandatory youth information is not consistently entered in JJEMS during the intake process.

1. DYS should continue to run its daily quality assurance reports to identify data omissions and to ensure that all JJEMS mandatory data fields are completed for youth intake files.

2. DYS should develop and update policies, procedures, and internal controls to ensure that JJEMS users properly complete youth intake files.

DYS does not have a formalized business-continuity plan.

1. DYS, in collaboration with EOHHS, should assess the extent to which it is dependent on the continued availability of information systems for all required computer processing and operational needs and should develop its recovery plan based on the critical aspects of its information systems. The plan should then be tested and the results incorporated into the plan.

2. DYS should identify an emergency relocation site to be used if its offices become inaccessible.

DYS does not have an advisory committee as required by the Massachusetts General Laws.

DYS, in concert with the secretary of EOHHS, should work with the Governor to establish an advisory committee to serve in an expert advisory capacity to DYS and to help the department fulfill its responsibilities.
Finding 5 Page 19

DYS’s internal control plan (ICP) and risk assessment need improvement, and the Internal Control Questionnaire (ICQ) it submitted to the Office of the State Comptroller (OSC) was inaccurate.

Recommendations Page 21

1. DYS should update its ICP, beginning with the risk assessment, and ensure that it includes JJEMS.

2. DYS should evaluate its policies and procedures and implement necessary changes at least annually or when conditions warrant.

3. DYS should ensure that the ICQs it submits to OSC each year are accurate.

Post-Audit Action

On September 8, 2014, DYS repealed its previous policy on approval of local educational agencies because it was entering into more-comprehensive contracts with its education providers, requiring that providers administer DYS educational programs and ensure that classrooms meet state time and learning requirements.3

During our audit, DYS informed us of new quality assurance controls it had implemented to ensure that incomplete fields in JJEMS are detected and resolved. Such fields are now reflected in a report that is distributed to regional, program, and other directors as notification of incomplete intakes.

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3. The state requires a minimum of 990 hours of structured learning over 180 school days.
OVERVIEW OF AUDITED ENTITY

Under Chapter 18A of the Massachusetts General Laws, the Department of Youth Services (DYS), within the Executive Office of Health and Human Services (EOHHS), is the Commonwealth’s juvenile justice agency that provides various educational, psychological, and health services to juvenile offenders. DYS’s expenditures for contracted education services totaled approximately $17.7 million in fiscal year 2013 and $19.2 million in fiscal year 2014.

General Education Services

DYS requires all youths who are detained or committed to attend classes while in DYS residential programs. DYS contracts with the Commonwealth Corporation (CommCorp)4 to administer these educational services. In turn, CommCorp subcontracts with the Collaborative for Educational Services (CES) to provide various educational services, including developing and administering the curriculum as well as recruiting, hiring, training, and evaluating appropriate administrative and certified professional teaching staff. CES administered these services at an annual cost of approximately $11.5 million for both fiscal years 2013 and 2014.

Special Education in an Institutional Setting

DYS estimates that 45% of the youths committed to DYS require special-education services. The Department of Elementary and Secondary Education (through its Division of Special Education in an Institutional Setting, which is responsible for these services) also contracts with CES to provide a program of special-education services for youths residing, or seeking educational services, in programs operated by DYS.

Vocational Education Services

CommCorp also provides vocational training in DYS’s residential programs and a community-based initiative called Bridging the Opportunity Gap (BOG). Vocational training offered at 14 DYS residential programs includes skills such as culinary services, horticulture, and residential construction. DYS explained that much of the vocational programming is aimed at providing a variety of occupational possibilities for youths and teaching youths “soft skills” (such as how to dress appropriately for work, how to create a resume, etc.). BOG provides training and services for five different programs:

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4. The Commonwealth Corporation is a quasi-public agency established on August 13, 1996. It is governed by a board of directors whose members are appointed by the governor.
based learning, vocational training, general educational development / high school equivalency test and tutoring services, arts and culture activities, and mentoring initiatives.

**Juvenile Justice Enterprise Management System**

In 2012, DYS and EOHHS\(^5\) completed the implementation of the Juvenile Justice Enterprise Management System (JJEMS). JJEMS is the system DYS uses to track outcomes and manage cases. JJEMS supports the needs of DYS to store youth data in a central and secure location while making the data available to DYS programs and contractors across the state over a secure interface. All youths new to DYS residential programs undergo a detailed screening and assessment during admission; this screening and assessment process is referred to as an intake. During the intake process, pertinent youth information is obtained and entered in JJEMS. A youth may enter multiple DYS residential programs (e.g., detention, assessment, and treatment) and may therefore have multiple intakes recorded in JJEMS.

JJEMS is configured with system edits that are the basis for a system dashboard that provides notification of intakes pending approval. This notification prompts users to review and authorize information/activity for which they are responsible. Although JJEMS can generate a quality assurance report titled “Pending Start Here for Intakes” that displays incomplete intakes from the previous day, this report was not generated or used during our audit period. However, DYS officials told us it was used as of July 2014.

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\(^5\) Effective February 19, 2009, DYS IT functions were consolidated under EOHHS per Executive Order No. 510. EOHHS’s responsibilities as of that consolidation include desktop and local area network services, website information architecture, and application services.
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) has conducted a performance audit of certain activities of the Department of Youth Services (DYS) for the period July 1, 2012 through June 30, 2014.

We conducted this performance audit 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.

Below is a list of our audit objectives, indicating each question we intended our audit to answer; the conclusion we reached regarding each objective; and, if applicable, where each objective is discussed in the audit findings.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Conclusion</th>
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<tr>
<td>1. Did DYS implement its new Juvenile Justice Enterprise Management System (JJEMS), and is all required and pertinent youth information maintained and accessible in real time?</td>
<td>No; see Findings 1 and 2</td>
</tr>
<tr>
<td>2. Did DYS collaborate with the Department of Elementary and Secondary Education (DESE) to align curriculum and (in accordance with Chapter 76, Section 1, of the General Laws) receive certification from local educational agencies (LEAs) regarding time and learning requirements?</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Did all educators working in DYS school components hold a valid Massachusetts educator’s license or possess the necessary waiver of this regulatory requirement?</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Did DYS determine the level of educational outcomes students were achieving?</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Did DYS address the problems we identified during our prior audit (No. 2002-0512-4T)?</td>
<td>No; see Finding 3</td>
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</table>

In addition, no advisory committee has been established within the department (Finding 4), and DYS did not update its internal control plan (ICP) and related policies and procedures, conduct an annual risk assessment for fiscal years 2013 and 2014, or accurately report information on the Internal Control Questionnaire it submitted to the Office of the State Comptroller (Finding 5).
To achieve our audit objectives, we reviewed applicable state and federal laws, rules, and regulations and DYS’s 2012 ICP, the most recent one available. We also reviewed prior DYS audits conducted by OSA and other independent auditors.

We asked DYS for information that was necessary to achieve our audit objectives, including an updated ICP specifically addressing the areas of audit, including curriculum, educator certification, and JJEMS. However, because we did not receive this documentation promptly, we assessed internal controls in these areas as “high risk” and increased our substantive testing accordingly.

Regarding whether DYS collaborated with DESE to align its curriculum with the statewide framework, we determined through interviews with senior management that DYS relies on its contractor the Commonwealth Corporation (CommCorp) and its subcontractor the Collaborative for Educational Services (CES) to perform this function. We obtained documentation from DYS outlining the CommCorp/CES review process to align the DYS curriculum with DESE’s statewide framework. Specifically, we obtained a comparison of the DESE statewide framework and the DYS curriculum guidelines to verify that the subject matter taught in DYS classrooms properly aligned with the state’s framework. Also, we determined whether DYS had in place a formal review and approval process regarding these curriculum guidelines.

To determine whether DYS received certification from their LEA regarding time and learning requirements as required by Chapter 76, Section 1, of the General Laws, we obtained and reviewed pertinent DYS policies and procedures that dictate that each of its classrooms must be certified as a private school. We interviewed DYS senior management regarding the department’s approval process for private-school designation with each of the LEAs. In addition, we met with school officials from five cities and towns hosting DYS educational programs to obtain an understanding of the private-school application and certification process for LEA approval.

To determine whether all educators working in DYS school components held a valid Massachusetts educator’s license or possessed the necessary waiver, we obtained a list of all general-education educators from DYS and special-education educators from DESE. We selected a non-statistical random sample for each population of educators and requested evidence that each educator had a valid license or waiver. The results of our non-statistical sample cannot be projected over the entire population, but only apply to the items selected. We verified, based on our review of educator licenses and other
documentation, that all educators sampled held a valid Massachusetts educator's license or possessed the necessary waiver.

To determine whether JJEMS was implemented and all required and pertinent youth information was maintained and accessible in real time, we reviewed the following documents:

- A Request for Response detailing the business and technical requirements for the new Web-based case-management and youth-tracking system and soliciting proposals for the development and implementation of the system. The Request for Response was advertised on November 1, 2005, with total anticipated expenditures of $2.5 million.

- The original contract awarded to Consilience Software Inc. on March 1, 2009 to develop and install JJEMS, as well as subsequent addenda totaling over $4 million.

- The JJEMS data dictionary\(^6\) to identify data-storage capability.

We also non-statistically sampled completed youth intakes and compared the source documentation with information in JJEMS to determine whether JJEMS contained accurate and complete information.

To assess the reliability of these data, we reviewed available documentation; interviewed DYS's staff and management, including regional directors, program directors, clinical directors, detention coordinators, and legal staff, as well as the Executive Office of Health and Human Services' information-technology (IT) officials responsible for the data; and performed basic reasonableness checks of the data against other sources of information to determine the accuracy and completeness of stored data.

To assess the reliability of processed data, we performed validity tests on selected youth data, including tests for missing data elements, fields, and/or values; relationships between data elements; and values within designated periods. We also tested JJEMS's general IT controls, including user access to programs and data, program changes, and computer operations. Based on that analysis, we concluded that the data used were of sufficient reliability for the background information, sampling population, and other purposes of our audit.

**Post-Audit Action**

On September 8, 2014, DYS repealed Policy 02.04.02(b), “Local Educational Agency (LEA) Approval.” DYS reasoned that it had entered into more comprehensive contracts with its education providers and that its new contracts outlined the most relevant and specific duties required under the repealed policy.

\(^6\) A data dictionary contains a list of all files in a database, the number of records in each file, and the name and type of each field.
Specifically, DYS’s new contracts require providers to administer DYS educational programs and ensure that classrooms meet state time and learning requirements.\textsuperscript{7}

\begin{footnotesize}
\textsuperscript{7} The state requires a minimum of 990 hours of structured learning over 180 school days.
\end{footnotesize}
DETAILED AUDIT FINDINGS WITH AUDITEE’S RESPONSE

1. Controls over the Department of Youth Services’ user-account management need improvement.

During the audit period, the Department of Youth Services (DYS) did not ensure that accounts used by employees and providers to access DYS’s case-management system, the Juvenile Justice Enterprise Management System (JJEMS), were deactivated when the users’ working relationships with DYS ended. Although we found no evidence that accounts had been used after the termination dates, not acting in a timely manner to deactivate or delete user accounts that are no longer required could allow a current user to gain higher access privileges than are currently authorized. As a result, information could have been vulnerable to unauthorized internal access.

We did determine that DYS had documented information-technology (IT) policies and procedures; assigned responsibility for system access security controls over JJEMS; and instituted appropriate controls for user account activation, password composition, and frequency of password changes.

JJEMS contains information related to detained and committed youths. Accordingly, its data elements contain confidential and sensitive data. Our tests of system access security indicated that out of the 429 individuals who left DYS or its providers during the audit period, 160 (37%) still had access to JJEMS as of June 30, 2014.

Authoritative Guidance

The Massachusetts Office of Information Technology has issued a document, “Enterprise Access Control Security Standards,” that all state agencies are required to comply with. According to the document, “these standards will help ensure that data, information, and other resources are protected from malicious or accidental events commensurate with their level of sensitivity.” This document defines standards based on Section 11 (Access Control) of the International Organization for Standardization / International Electrotechnical Commission\(^8\) document 27002:2005, “Information technology—Security techniques—Code of practice for information security management,” and includes best practices in the areas of business requirement for access control, user access management, user responsibilities, network access control, operating system access control, application and information access control, and mobile computing and teleworking.

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\(^8\) This joint committee establishes guidelines and general principles for information security management.
Under the Massachusetts General Laws, the Executive Office of Health and Human Services’ (EOHHS’s) IT department is responsible for overseeing JJEMS’s IT functions. Although EOHHS is responsible for those functions, DYS is responsible for the managerial aspect of IT security (e.g., approving access requests and notifying EOHHS of employee terminations).

There were no written IT policies and procedures related to JJEMS in 2013; however, in 2014, EOHHS established an information security plan (ISP) “to guard information and critical resources from a wide range of threats in order to guarantee business continuity, maximize return on investments, minimize business risk and increase business opportunities.” The Identity and Access Management section of the plan states that departments, such as DYS, are responsible for “periodic user/role reviews as well as user privileges, and request[ing] the appropriate department to deactivate user accounts for users’ no longer needing access.”

Reasons for Unauthorized or Inappropriate Access

We found that although DYS had a policy (#01.05.20) for “Separation from Employment,” the policy did not state when an employee’s access to IT systems and resources should be rescinded. Also, there were no documented policies or procedures requiring DYS’s Human Resources Division to request that EOHHS IT deactivate JJEMS access privileges of individuals whose employment with DYS had been terminated. Thus DYS does not have a process in place to communicate required information to enable personnel to understand and carry out their internal control responsibilities. In addition, DYS had not implemented internal controls to ensure that JJEMS user access was reviewed periodically as required by the EOHHS ISP.

Recommendations

1. DYS should immediately review the status of all active JJEMS users and deactivate access privileges for those who no longer require access and/or are not authorized to have it.

2. DYS should develop and document policies and procedures requiring that its Human Resources Division notify EOHHS IT of any changes in employee status that would warrant a change or deactivation of JJEMS access privileges. These policies and procedures should also include requiring periodic (e.g., quarterly) reviews of user access lists to ensure that specific access privileges are appropriate and up to date.

3. DYS should establish and implement controls to ensure that a process is in place to communicate required information to enable personnel to understand and carry out their internal control responsibilities.
Auditee's Response

EOHHS has a consolidated Human Resources Department, which handles all official HR processes, including some of the transactions relative to job reassignment and terminations. There are also DYS human resources personnel who handle certain internal processes. Currently, each program has an access administrator who informs DYS’ JJEMS Regional Administrators (“JRAs”) of a change in an employee's status. The JRAs are responsible for terminating access to the Virtual Gateway. This process is similar to the manner in which access to the Virtual Gateway is initiated. Since the Audit, DYS has implemented enhanced procedures to insure termination of access to the Virtual Gateway upon an individual’s termination from service from DYS or a DYS contracted provider.

DYS leadership, in conjunction with the JRAs, has developed a process to more efficiently alert the necessary EOHHS and DYS staff of a necessary deactivation. Moving forward, DYS will send monthly reports to DYS providers identifying all of the JJEMS users. The providers will have to verify the users that are active, as well as report any newly deactivated users.

Concerning the number of individuals who left DYS or its providers, but who still had access to JJEMS, of the 160 individuals identified, 30 were individuals who transferred either from state employment to providers or between providers. As such, their JJEMS accounts were not deactivated as they remained employed within DYS. Therefore, the total number of individuals who should be identified in this section is 130.

Auditor's Reply

Regarding the 30 individuals that DYS states were not deactivated because a working relationship had continued, e.g., they had either transferred from state employment to a DYS provider or between DYS providers, we requested that DYS provide us with its list of these 30 individuals along with supporting documentation of their initial termination from and reactivation in JJEMS. However, DYS indicated that it could not promptly provide us with this information.

Based on its response, DYS is taking measures to address our concerns on this matter.

2. Mandatory youth information is not consistently entered in JJEMS during the intake process.

DYS is not entering required information in JJEMS for youths being detained or committed to the agency; 57 (95%) of the 60 intake cases tested lacked mandatory information. Incomplete youth intake information could result in untimely or inappropriate treatment of a youth’s medical, psychological, or behavioral needs. Additionally, incomplete youth intake information may mean that clinicians, caseworkers, program directors, DYS vendors, management, and other authorized users will not have this information available if they need it.
The Office of the State Auditor obtained the total population of intakes performed during the audit period and non-statistically sampled a random selection of 60 out of 12,245 intakes\(^9\) during our audit period to verify that all mandatory youth information was entered completely and accurately in JJEMS. Although we sampled 60 cases, the actual number of data elements we tested varied, depending on the type of case and its associated guidelines. Our testing indicated that, of the 3,604 data elements reviewed, 467 (13\%) lacked the required supporting documentation. Of the 61 mandatory data elements tested, 19 elements accounted for 70\% of the missing information. These 19 elements are listed in Appendix A.

**Authoritative Guidance**

DYS Policy 02.01.01(c), “Intake Procedures,” outlines specific information that is to be collected upon intake (see Appendix B for the full list).

**Current Practices**

DYS identified and configured JJEMS fields with mandatory youth information. These fields are labeled in JJEMS with a double asterisk (**) or single asterisk (*).

DYS stated that a double asterisk should prevent the JJEMS user from completing the youth’s intake until the data for this field is entered. Double-asterisk fields contain information such as court information (e.g., orders, location, charges, and disposition) and watch level (e.g., suicide watch). However, our test determined that users could complete intakes without filling in these fields.

A single asterisk represents a required field; however, users are intended to be able to complete intakes without entering data in single-asterisk fields. These fields contain information such as a youth’s physical attributes, health and clinical information, and verifications that required assessments have been conducted.

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\(^9\) A youth may enter multiple DYS residential programs, (e.g., detention, assessment, treatment) and therefore, a youth may have multiple intakes recorded within JJEMS.
**Reasons for Incomplete Information**

During the audit period, DYS had not established and implemented sufficient policies, procedures, and related internal controls to ensure that JJEMS users properly completed youth intake files. Its policy “Intake Procedures” had not been updated to reflect how JJEMS operated with regard to recording intakes. In addition, JJEMS lacked the necessary quality assurance controls to alert users of incomplete mandatory intake data fields; as a result, mandatory intake data fields that were not filled in were not corrected, and users were able to proceed with the intake process without completing those fields.

**Post-Audit Action**

During our audit, DYS informed us that new quality assurance controls were implemented in July 2014 to mitigate the risk of incomplete fields in JJEMS during intake. JJEMS regional administrators now run a daily quality assurance report, titled “Pending Start Here for Intakes,” that displays incomplete intakes from the previous day. The report is e-mailed to all regional directors; the director of Operations; and the director of Residential Services, who notifies the directors of all programs listed on the report.

**Recommendations**

1. DYS should continue to run its daily quality assurance reports to identify data omissions and to ensure that all JJEMS mandatory data fields are completed for youth intake files.

2. DYS should develop and update policies, procedures, and internal controls to ensure that JJEMS users properly complete youth intake files.

**Auditee’s Response**

*DYS acknowledges that data integrity is an area that needs greater focus by staff at all levels. As such, the following measures are underway per the auditors recommendation that “DYS . . . develop and update policies, procedures and internal controls to ensure JJEMS users properly complete youth intake files:”*

- All managers are required to have JJEMS data integrity as a performance evaluation goal for 2015. This requirement will hold managers directly accountable for the data integrity of their job environment.

- A master Quality Assurance report was released during the week of June 22, 2015. This QA report expands on the current “Pending Start Here for Intake” QA report that has been used to remediate intake data concerns since July 2014 by listing all individual youth having missing critical data from their JJEMS files. The report will be distributed to DYS management for dissemination to appropriate staff for immediate remediation. Job aids are being created to aid field staff in making this data correction consistent and expeditious.
Auditor’s Reply

Based on its response, DYS is taking measures to address our concerns on this matter.

3. Prior audit result unresolved—DYS does not have a formalized business-continuity plan.

Our prior audit report (No. 2008-0512-4T) stated that DYS did not have a formal comprehensive disaster recovery and business-continuity plan (BCP) as required by Executive Order 490. Accordingly, we recommended that DYS formally assess the impact of the loss of IT operations and determine the extent to which contingency plans could be developed to address recovery of critical business operations. We further recommended that DYS develop user area plans appropriate to the department’s IT processing environment and information accessibility requirements.

Our current audit indicated that DYS has not implemented our prior audit recommendation to develop a BCP. The absence of a BCP could hinder or prevent DYS from restoring computer operations in the event of unforeseen interruptions in business operations. Specifically, without a BCP, DYS may experience delays in reestablishing mission-critical functions, such as entering youths into the DYS system, having immediate access to youths’ medical and clinical information, and recovering backup information from offsite storage centers in a timely manner. Further, DYS may not be able to ensure continuity and sustainability of its operations without an up-to-date BCP.

An up-to-date, effective BCP should identify the manner in which essential services would be restored or replaced without the full use of the data center facility or with a loss of network communications. The BCP should identify the policies and procedures to be followed, detailing the logical order for restoring critical data processing functions either at the original site or at an alternative processing site. In addition, the BCP should describe the tasks and responsibilities necessary to transfer and safeguard backup copies of data files, program software, and system documentation from off-site storage to the site being used for restoration efforts.

DYS responded to this issue by stating that EOHHS’s Operations Services Group is responsible for developing, advancing, and executing an agency-wide (i.e., including DYS) IT continuity and disaster recovery planning effort. In addition, DYS provided us with the EOHHS 2014 ISP, which describes a BCP and states that it should consist of a Business Impact Analysis, Disaster Recovery Plan, and Incident Response. However, DYS was unable to provide us with any of these specific documents. DYS
subsequently informed us that EOHHS does not have an agency-wide BCP and that one is currently under development, with an anticipated availability date of fiscal year 2016.

**Recommendations**

1. DYS, in collaboration with EOHHS, should assess the extent to which it is dependent on the continued availability of information systems for all required computer processing and operational needs and should develop its recovery plan based on the critical aspects of its information systems. The plan should then be tested and the results incorporated into the plan.

2. DYS should identify an emergency relocation site to be used if its offices become inaccessible.

**Auditee’s Response**

The EOHHS information technology department is responsible for the administration and maintenance of the JJEMS system, and all EOHHS IT assets, hardware and software and the location of its servers in Chelsea. On June 20, 2015, EOHHS IT completed an infrastructure backup for JJEMS by moving the system to the “cloud” as a part of the VG4 transition, and it is now hosted at Logicworks. The largest application there, HIE, recently completed BCP efforts. Additionally, the JJEMS data is backed up nightly at MITC (MassIT) and are retained and available there. The backup is also copied to the Springfield Data Center as a secondary control/backup.

DYS has 5 Regional Offices located throughout the State; a Central Office in Boston; and 63 hardware secure, staff secure or district offices. In December 2013, DYS updated its Continuity of Government Plan (“COG”). In addition to identifying key DYS positions and the delegation of authority, the COG identified an emergency relocation site of the DYS Main Office which is located at 600 Washington Street, 4th Floor, Boston, MA. In the event of an emergency, the COG provides that the DYS Main office will relocate to its Central Region Office at 288 Lyman Street, Westborough, MA.

DYS has engaged in comprehensive emergency planning beginning in June 2014. In June 2014 DYS received a grant for technical assistance for emergency preparedness from the Office of Juvenile Justice and Delinquency Prevention (“OJJDP”). OJJDP is a part of the United States Department of Justice and provides assistance to states in their efforts to implement effective prevention programs, and improve the juvenile justice system. In connection with the OJJDP grant, DYS formed a committee to draft an emergency preparedness plan to address all facets of emergency preparedness, including: the relocation of youth from sites, depopulation of locations, medical triage of youth, communication between staff, transportation and chain of command. This plan was finalized in March of 2015. Training was conducted of senior regional and program staff in connection with the draft plan. Site-specific plans are consistent with the Agency plan are also being drafted.

In addition to the DYS Emergency Operations Plan, DYS completed a Continuity of Operations Plan (“COOP”) as of May 27, 2014 in accordance with Executive Order 475. The COOP outlines the responsibilities of senior management, details communications, and contains coordinating
instructions. The COOP also has an order of succession, a delegation of authority and procedural responsibilities of staff.

**Auditor’s Reply**

In other written comments, DYS acknowledged to us that they misunderstood our request to review its business continuity plan and thought that the information we requested related solely to its JJEMS and IT assets. Only after the completion of our audit and reading our draft audit report did it become clear that the information we asked for was much broader and more encompassing. For this reason, DYS provided us with a copy of its Continuity of Government Plan and its Continuity of Operations Plan mentioned above. However, because we did not perform a review and test of these plans, we cannot attest to whether the plans are operating as prescribed by management and fulfilled all regulatory obligations.

4. **No advisory committee has been established within DYS.**

DYS does not have a committee to advise its commissioner on policy and other matters. As a result, DYS is not benefiting from the unique knowledge, skill, and expertise of the required advisory committee and cannot use these advantages in developing and administering its programs. Moreover, because the composition and structure of the advisory committee was intended to enhance the effectiveness of DYS’s work and its ultimate governance, the goals, objectives, and mission of the organization may be at risk without an advisory committee in place.

**Authoritative Guidance**

Chapter 18A, Section 9, of the General Laws requires DYS to have an advisory committee to “advise the commissioner on policy, program development and priorities of need.” The committee should include the commissioner of DYS; the commissioners of the Departments of Transitional Assistance, Early Education and Care, Mental Health, Elementary and Secondary Education, and Correction; the commissioners of Probation and the Massachusetts Rehabilitation Commission; the chairs of the parole board and of the Massachusetts Commission against Discrimination; and the executive secretaries of the Massachusetts Society for the Prevention of Cruelty to Children and the Massachusetts Committee on Children and Youth. Nine other members are to be appointed by the secretary of EOHHS and approved by the Governor. The secretary of EOHHS also appoints the committee’s chairperson and vice chairperson.
**Reasons for Not Establishing an Advisory Committee**

According to DYS management and legal counsel, the advisory committee was to be appointed by the Governor but was never appointed. However, 12 members of the committee are appointed on the basis of the position they hold in various agencies of the Commonwealth rather than by the Governor. Nine other members are appointed by the secretary of EOHHS, and only these nine members must be approved by the Governor. DYS management has indicated that it has no authority to appoint these additional nine members and therefore is not responsible for the establishment of the committee.

**Recommendation**

DYS, in concert with the secretary of EOHHS, should work with the Governor to establish an advisory committee to serve in an expert advisory capacity to DYS and to help the department fulfill its responsibilities.

**Auditee's Response**

_G.L. c. 18A, §9 was promulgated in 1969, was amended in a minor fashion in 1970, 1972, 1977, 1985 and had technical corrections made in 1998. Illustrative of the outdated nature of this statute are the titles for the state agencies identified. While the Auditor has altered the titles of the state agencies to be represented on the Commission to reflect the 2014 realities, the agencies that are to actually serve on the Commission include, the Department of Welfare, and the Department of Education and the Massachusetts Commission on Children. In fact, the Commission on Children is no longer in existence and no information has been found on when it ceased to exist._

_DYS is in constant collaboration with the agencies who would otherwise serve on such a commission. DYS has partnered with probation under the leadership of their Commissioner to expand programming options for youth, training opportunities for staff and data collection efforts in the service of the Juvenile Detention Alternative Initiative (“JDAI”). DYS also partners with Probation and a number of other juvenile justice system stakeholders including DCF on the implementation of a universal risk tool for all youth presenting in juvenile court as part of JDAI. DYS and the Department of Elementary and Secondary Education’s (“DESE”) Special Education in Institutional Settings (“SEIS”) program collaborate to provide coordinated general and special education services for DYS youth. DYS also collaborates annually with DESE regarding the DYS educational curriculum and produces a joint report with DESE regarding education metrics and outcomes. Similarly, DYS partners regularly with the Department of Mental Health (DMH) pursuant to an MOU that provides guidance on how DYS youth can access necessary DMH services as well as on several other initiatives; DYS is an active member of the Children’s League and attends their regular meetings and participates in many of their events. In short, DYS has and will continue to work in a collaborative manner with other youth serving state agencies, the courts, and youth advocates to insure that DYS youth are well served, both while in DYS custody, and upon discharge._
Auditor’s Reply

We do not dispute that some agency names listed in the above-mentioned statute are outdated and need updating or that DYS has formed partnerships and works in a collaborative manner with other state agencies; the reality that has not changed is that the law requires DYS to have an advisory committee. It is DYS’s responsibility to comply with its enabling legislation. If DYS should desire to seek relief, it should pursue changes to its legislation accordingly.

5. DYS’s internal control plan and risk assessment need improvement.

DYS did not have a complete and updated internal control plan (ICP) and related policies and procedures. The absence of a complete and comprehensive ICP places DYS at risk of not achieving all its objectives. In addition, the Internal Control Questionnaire (ICQ) that DYS submitted to the Office of the State Comptroller (OSC) during fiscal year 2014 was inaccurate. Specifically, the ICQ stated that the ICP had been updated in the past year; however, our review of DYS’s ICP showed that it had not been updated since March 28, 2012. Incorrect information on these questionnaires prevents OSC from effectively assessing the adequacy of the agency’s internal control system.

DYS has not revised its ICP and risk assessment to reflect changes in the department’s internal control environment for its mission-critical case-management system. The ICP specifically states that “DYS considers its current legacy information systems to be major risks.” The previous legacy systems were replaced by JJEMS in August 2012, but the ICP does not include any JJEMS internal control risks or risk response. The risk assessment was also related to the legacy systems, not to JJEMS.

In addition, the agency has not reviewed and updated its policies and procedures in conjunction with the agency’s ICP. In our review of DYS’s policies and procedures related to IT, youth intakes, and education, we found no evidence to suggest that these policies and procedures were reviewed and/or updated to reflect the current control environment. In addition to the ICP, the “Intake Procedures” policy has not been updated to reflect the actual data elements captured in JJEMS. Finally, DYS’s repeal of certain education policies indicates that the department was aware that some of its policies and procedures were not consistent with operating procedures in place during our audit period. These policies and procedures are listed in the table below.
Identified Policies and Procedures Requiring Updating

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Document Number</th>
<th>Effective Date</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Technology Procedures</td>
<td>01.08.01(a)</td>
<td>April 1, 2004</td>
<td>01.08—Technology Policies</td>
</tr>
<tr>
<td>Internet and World Wide Web</td>
<td>01.08.06(a)</td>
<td>April 1, 2004</td>
<td>01.08—Technology Policies</td>
</tr>
<tr>
<td>Intake Procedures</td>
<td>02.01.01(c)</td>
<td>January 1, 1999</td>
<td>02.01—Intake Policies</td>
</tr>
<tr>
<td>Transportation</td>
<td>02.01.02(b)</td>
<td>January 1, 1999</td>
<td>02.01—Intake Policies</td>
</tr>
<tr>
<td>Security and Safety Procedures for Transportation</td>
<td>02.01.03</td>
<td>June 1, 1999</td>
<td>02.01—Intake Policies</td>
</tr>
<tr>
<td>[Local Educational Agency] Approval*</td>
<td>02.04.02(b)</td>
<td>January 1, 1999</td>
<td>02.04—Education Policies</td>
</tr>
<tr>
<td>School and Teacher Schedules*</td>
<td>02.04.03(b)</td>
<td>January 1, 1999</td>
<td>02.04—Education Policies</td>
</tr>
<tr>
<td>Educational Records*</td>
<td>02.04.04(b)</td>
<td>January 1, 1999</td>
<td>02.04—Education Policies</td>
</tr>
<tr>
<td>High School Equivalency (GED)</td>
<td>02.04.06(c)</td>
<td>April 15, 2008</td>
<td>02.04—Education Policies</td>
</tr>
</tbody>
</table>

* This policy has been repealed.

Authoritative Guidance

The OSC Internal Control Guide stresses the importance of internal controls and the need for departments to develop an ICP, defined as follows:

"The Office of the Comptroller defines an internal control plan as a high level department-wide summarization of the department’s risks and the controls used to mitigate those risks. This high level summary must be supported by lower level detail, i.e. departmental policies and procedures. . . . The plan should be reviewed and updated as conditions warrant, but at least annually.

The Internal Control Guide also requires risk assessments to be updated each year.

In addition, DYS Policy 01.01.01(b), “Policy Administration,” requires an annual review of all policies and procedures.

Finally, each year, OSC issues a memo (Fiscal Year Update) to internal control officers, single audit liaisons, and chief fiscal officers instructing departments to complete an ICQ designed to provide an indication of the effectiveness of the Commonwealth’s internal controls. In the Representations section of the questionnaire, the department head, chief financial officer, and internal control officer confirm that the information entered in the questionnaire is accurate and approved."
Reasons for Lack of Updates

According to DYS management, although the ICP and risk assessment were neither reviewed nor updated in fiscal year 2013, they were reviewed in fiscal year 2014 and that review did not necessitate any changes. When we asked why the ICP had not been updated to reflect the current information system, DYS management acknowledged that the ICP should have been updated to reflect the change to JJEMS.

With regard to the ICQ, DYS’s responses were incorrect because the department had not established the necessary controls to evaluate and verify the data it received from internal sources to support its ICQ responses.

Recommendations

1. DYS should update its ICP, beginning with the risk assessment, and ensure that it includes JJEMS.
2. DYS should evaluate its policies and procedures and implement necessary changes at least annually or when conditions warrant.
3. DYS should ensure that the ICQs it submits to OSC each year are accurate.

Auditee’s Response

In the past two months, the Chief Financial Officer (“CFO”) has comprehensively reviewed and updated the ICP, including updates related to JJEMS. These updates have been certified by the CFO following review by the state comptroller’s office during July 2015.

Beginning last fall, the DYS Director of Policy and Training began reviewing all DYS policies and meeting with the applicable departments to determine which policies need to be updated or rescinded in accordance with current DYS practices.

Auditor’s Reply

Based on its response, DYS is taking measures to address our concerns on this matter.
## APPENDIX A

### Top 19 Juvenile Justice Enterprise Management System Data Elements with Errors

<table>
<thead>
<tr>
<th>Data Element*</th>
<th>Description of Data Element</th>
<th>Errors</th>
<th>Percentage Incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notify DA on Bail</td>
<td>Notification to the District Attorney of the youth’s bail status</td>
<td>30</td>
<td>50%</td>
</tr>
<tr>
<td>Client Searched</td>
<td>Documentation that the youth was searched upon entering the Department of Youth Services (DYS) program</td>
<td>25</td>
<td>42%</td>
</tr>
<tr>
<td>Referred by</td>
<td>The name of the individual agency or court responsible for referring the youth to the DYS program</td>
<td>23</td>
<td>38%</td>
</tr>
<tr>
<td>Inventory Done by</td>
<td>The name of the DYS employee responsible for listing the youth’s possessions</td>
<td>23</td>
<td>38%</td>
</tr>
<tr>
<td>Advocate Assigned</td>
<td>The name of the DYS employee who is assigned as an advocate to the youth</td>
<td>23</td>
<td>38%</td>
</tr>
<tr>
<td>Notice to Parent/Guardian Offered</td>
<td>Notification to the parent/guardian that a youth has been admitted to a DYS program</td>
<td>21</td>
<td>35%</td>
</tr>
<tr>
<td>Has the Probation Department Provided Any Information in the Probation Report Attached to the Mitt That Indicates Youth is a Medical, Mental Health, or Suicide Risk</td>
<td>Information provided by the Probation Department via a mittimus from the court that indicates whether the youth is a medical, mental health, or suicide risk</td>
<td>19</td>
<td>32%</td>
</tr>
<tr>
<td>Body Map Complete</td>
<td>Documentation of signs of physical abuse or trauma, gang affiliations, or distinguishing marks</td>
<td>18</td>
<td>30%</td>
</tr>
<tr>
<td>Mittimus Scanned</td>
<td>A scan of a legal document from the court that includes a transcript of the conviction(s) and sentencing stages</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Does the Transporting Person Have Any Information That Indicates Youth Is a Medical, Mental Health, or Suicide Risk</td>
<td>Observations made during transport to and from a DYS program that indicates whether the youth is a medical, mental health, or suicide risk</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Client in Continuous Custody Before Entering Facility</td>
<td>Note of whether the youth was in DYS custody before entering the facility</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Data Element*</td>
<td>Description of Data Element</td>
<td>Errors</td>
<td>Percentage Incomplete</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------</td>
<td>--------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Handbook Given</td>
<td>Documentation that the DYS handbook, consisting of the program's policies and procedures, was given to the youth when s/he entered the DYS program</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Drugs / Alcohol Issues</td>
<td>Documentation by DYS of whether the youth admits to or exhibits any drug and/or alcohol use</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>Has 58A Evaluation Been Requested</td>
<td>A note of whether a prosecutor has requested a dangerousness hearing to determine whether an order of pretrial detention is necessary</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>Property Inventory Done</td>
<td>Verification that a youth’s personal items were documented upon intake</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>[Prison Rape Elimination Act, or] PREA Given to Client</td>
<td>Documentation that DYS has provided documentation under PREA to all youths entering a DYS program as required by federal law</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>Physical Health (Medications/Allergies)</td>
<td>Documentation of a youth’s physical health, including medications taken and known allergies</td>
<td>12</td>
<td>20%</td>
</tr>
<tr>
<td>Other Suicidal/ Mental Health/Hospitalization information</td>
<td>Information regarding a youth’s mental health and resulting hospitalization, if any</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td>Has a 68A Evaluation Been Requested?</td>
<td>A court referral for a youth’s mental health evaluation</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>328</strong></td>
<td></td>
</tr>
</tbody>
</table>

* All data-element names are quoted directly from the Juvenile Justice Enterprise Management System.

Of the mandatory data elements tested, 31% had at least an 18% incomplete-information rate.
# APPENDIX B

## List of Tested Mandatory Fields in the Juvenile Justice Enterprise Management System

1. Consent to Treat Form
2. Person Starting Intake
3. Type of Intake
4. Residential Unit for Intake
5. Is the client arriving, or returning, from a psychiatric hospitalization?
6. Reception (Intake)
7. Time in AM/PM Format
8. Mittimus
9. Mittimus/Habe
10. Hair Color
11. Height
12. Ethnicity
13. Race
14. Skin Tone
15. Eye Color
16. Weight
17. Current Grade
18. Charge/Revocation Reason
19. Docket Number
20. Remand Date
21. Court Date Type
22. Court
23. Bail
24. 68A Requested
25. Notify DA on bail
26. Disposition
27. Does the transporting person have any information (observed behavior) that indicates youth is a medical, mental health, or suicide risk?
28. Has the probation department provided any information in the Probation Report attached to the Mittimus
29. Other Suicidal/ Mental Health/Hospitalization information
30. Physical Health Medications/Allergies
31. Drugs / Alcohol Issues?
32. Attitude Today?
33. Referred by?
34. Has a 68A Evaluation Been Requested?
35. Has 58A evaluation been requested
36. Client in continuous custody before entering facility
37. Body Map Complete
38. Client Searched
39. Property Inventory Done
40. Inventory done by:
41. Handbook given
42. PREA given to client
43. Notice to parent/guardian offered
44. Advocate Assigned
45. Risk Assessment: Date of Administration
46. Type of Risk Assessment
47. Was intake stopped at this point because of immediate clinical or medical reasons?
48. After clinical staff discussion, can the MAYSi be waived on this intake?
49. Screener
50. Risk Assessment Complete
51. Clinical Director Approval (Approved/Needs Reworking/ Submitted)
52. All 52 MAYSi questions contain responses
53. Will any action be taken?
54. Date
55. Watch Level
56. Reason for Change
57. Staff member approving level (yourself or other)
58. Days (Select All Applicable Days)
59. Session
60. Start Date
61. Frequency

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10. All field descriptions are quoted directly from the Juvenile Justice Enterprise Management System.