STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY

DEPARTMENT OF HEALTH
AND RELATED HEALTH ADVISORY ENTITIES

Performance Audit Report

October 2018

Justin P. Wilson, Comptroller

Division of State Audit

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TENNESSEE COMPTROLLER OF THE TREASURY

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October 31, 2018

The Honorable Randy McNally
Speaker of the Senate
The Honorable Beth Harwell
Speaker of the House of Representatives
The Honorable Mike Bell, Chair
Senate Committee on Government Operations
The Honorable Jeremy Faison, Chair
House Committee on Government Operations
and
Members of the General Assembly
State Capitol
Nashville, Tennessee 37243
and
The Honorable John J. Dreyzehner, Commissioner
Tennessee Department of Health
710 James Robertson Parkway
Nashville TN 37243

Ladies and Gentlemen:

We have conducted a performance audit of selected programs and activities of the Department of Health, the Genetic Advisory Committee, the Perinatal Advisory Committee, the Traumatic Brain Injury Advisory Council, the Advisory Committee for Children's Special Services, and the Tennessee Medical Examiner Advisory Council for the period January 1, 2015, to September 30, 2018. This audit was conducted pursuant to the requirements of the Tennessee Governmental Entity Review Law, Section 4-29-111, *Tennessee Code Annotated*.

Our audit disclosed certain findings, which are detailed in the Audit Conclusions section of this report. Management of the Department of Health has responded to the audit findings; we have included the responses following each finding. We will follow up the audit to examine the application of the procedures instituted because of the audit findings.

This report is intended to aid the Joint Government Operations Committee in its review to determine whether each entity should be continued, restructured, or terminated.

Sincerely,

Deborah V. Loveless

Deborah V. Loveless, CPA, Director
Division of State Audit

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Division of State Audit
Department of Health and Related Entities
Performance Audit
October 2018

Our mission is to make government work better.

AUDIT HIGHLIGHTS

The Department of Health's mission
is to protect, promote and improve the health and prosperity of people in Tennessee.

We have audited the Department of Health and the Genetic Advisory Committee, the Perinatal Advisory Committee, the Traumatic Brain Injury Advisory Council, the Advisory Committee for Children's Special Services, and the Tennessee Medical Examiner Advisory Council for the period January 1, 2015, to September 30, 2018. Our audit scope included a review of internal control and compliance with laws, regulations, and contracts or grant agreements in the following areas:

Scheduled Termination Date:
June 30, 2019

- environmental health inspections;
- the HealthCare Safety Net for the Uninsured;
- the nursing home Civil Monetary Penalty Quality Improvement program;
- the Office of the State Chief Medical Examiner;
- the *Joint Annual Report* and the *Hospital Summary Report;*
- health advisory entities; and
- information on the Vital Records Information System Management System, Tennessee health departments, newborn testing, and high containment laboratories and select agents.

Key Conclusions

Our review resulted in three findings, seven observations, one matter for legislative consideration, and one emerging issue.

FINDINGS

- The department was unable to provide verifiable supporting documentation for the *HealthCare Safety Net Update* reports and did not include pertinent information related to the use of program funds (page 16).
- The department and the Central Procurement Office did not ensure that contracts with providers were proper and in accordance with state procurement policies; furthermore, the department was not monitoring all provider contracts, and its monitoring procedures were deficient (page 18).
- Management should improve its controls over the review process of *Joint Annual Reports* submitted by hospitals, including issuing deficiencies to hospitals, as required by statute, to ensure reports are as accurate as possible (page 41).

OBSERVATIONS

The following topics are included in this report because of their effect on the department's operations and on the citizens of Tennessee:

- The Division of Environmental Health has taken steps to improve its environmental health inspection process so that management can quickly access statewide inspection data and more easily monitor its compliance with inspection timeliness (page 10).
- The Commissioner and the department's Patient Care Advocacy Office should continue efforts to bolster the use of Civil Money Penalty funds to benefit the state's nursing home residents (page 27).
- Counties' noncompliance in reporting death investigations contributes to incomplete data reporting and collection, which impacts the quality of public health data available (page 38).
- The Advisory Committee for Children's Special Services has not had a quorum for recent meetings, limiting its effectiveness; additionally, members are not completing conflict-of-interest forms (page 52).
- Some members of the Genetic Advisory Committee missed at least half of the committee's meetings (page 53).
- Several members of the Perinatal Advisory Committee missed at least half of the committee's meetings (page 55).
- The Traumatic Brain Injury Advisory Council conducted business during a meeting where it did not have a quorum; additionally, some members missed at least half of the committee's meetings (page 57).

MATTER FOR LEGISLATIVE CONSIDERATION

The General Assembly may wish to consider whether an increase in the Office of State Chief Medical Examiner's authority and enforcement power, or other statutory changes, may help address the identified weaknesses (page 38).

EMERGING ISSUE

Hospital Closures and Coverage of Care – As of August 2018, 20 counties in the state had no acute care hospital. Multiple factors have contributed to rural hospital closures since 2012, including population decreases, changing payer mixes in rural areas, and technological advancements that are sometimes out of reach of rural hospitals. Areas where hospitals have closed have experienced multiple negative economic and health impacts. The Department of Health is limited in what it can do to improve the situation (page 44).

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Performance Audit
Department of Health and
Related Health Advisory Entities

INTRODUCTION

AUDIT AUTHORITY

We conducted this performance audit of the Department of Health, the Genetic Advisory Committee, the Perinatal Advisory Committee, the Traumatic Brain Injury Advisory Council, the Advisory Committee for Children's Special Services, and the Tennessee Medical Examiner Advisory Council pursuant to the Tennessee Governmental Entity Review Law, Title 4, Chapter 29, *Tennessee Code Annotated*. Under Section 4-29-240, the department and related entities are scheduled to terminate June 30, 2019. Section 4-29-111 authorizes the Comptroller of the Treasury to conduct a limited program review audit of the agencies and to report to the Joint Government Operations Committee of the General Assembly. Through the audit, we intend to aid the committee in determining whether the Department of Health and related entities should be continued, restructured, or terminated.

BACKGROUND

The Department of Health was established in 1923 under Title 68, Chapter 1, Part 1, *Tennessee Code Annotated*. The department's mission is to protect, promote, and improve the health and prosperity of people in Tennessee. Administratively attached to the department and included in our scope are the Genetic Advisory Committee, the Perinatal Advisory Committee, the Traumatic Brain Injury Advisory Council, the Advisory Committee for Children's Special Services, and the Medical Examiner Advisory Council.

The department is supervised by a Commissioner, a Chief of Staff, two Deputy Commissioners, and a Chief Medical Officer. According to the 2018–2019 state budget, the department reported that as of fiscal year 2017, it employs 3,234 individuals and operates 7 regional health offices, 89 county health departments, and 2 state laboratories.

ORGANIZATION

As shown in the organization chart on page 5, the Commissioner oversees the department. The department is organized into four major divisions overseen by the Chief Medical Officer, the Deputy Commissioner for Population Health, the Deputy Commissioner for Operations, and the Chief of Staff. Also, the Commissioner directly oversees the Offices of Communications and Media Relations, Compliance and Ethics, General Counsel, Health Policy, and Primary Prevention.

The Chief Medical Officer oversees the following departmental units:

- The *Communicable Environmental Disease and Emergency Preparedness Section* works with staff in regional and local health departments to provide epidemiological services to protect the citizens of the state from infectious diseases. The statewide Public Health Emergency Preparedness Program promotes state, local, and regional preparedness for and response to acts of bioterrorism, infectious outbreaks, and other public health threats and emergencies. This section also houses the Division of Environmental Health, which inspects facilities, issues permits, and conducts complaint investigations across the state.
- The *Community Health Services Section* supervises the operation of 89 county health departments and 7 regional offices that provide healthcare and preventative programs across the state. The section is responsible for administering multiple federal programs focused on rural health and for distributing and placing health professionals and related workers into areas of the state with shortages of those professions.
- The *Health Licensure and Regulation Division* regulates emergency medical services, healthcare facilities, and health professionals.
- The *Laboratory Services Division* consists of the microbiological and environmental laboratories in Nashville and Knoxville that perform a wide range of microbiological and other testing in support of various state departments, including Environment and Conservation, Labor, and Transportation.
- The *Office of Public Health Informatics and Analytics* provides support to the entire department to ensure that the department's information systems effectively support existing and future public health programs by providing leadership, training, advocacy, and services to define, develop, and deploy best practices in informatics.
- The *Office of Quality Improvement* continuously pursues opportunities for improvement to assure the quality of community service delivery in Tennessee. The office sets standards based on policies, program guidelines, and protocol; reviews and audits regional and metro health departments; promotes and directs evidence-based practices; and oversees research studies with clients through Internal Review Board (IRB) approval. The IRB is appointed as a department-wide committee, whose mission is to uphold the ethical principles and regulations for all proposed research involving human participants.

The following units report to the Deputy Commissioner for Population Health:

- The *Division of Family Health and Wellness* includes the Maternal and Child Health; Special Supplemental Nutrition; and Chronic Disease and Health Promotion programs, which are provided in all 95 Tennessee counties through a network of local and regional health departments.
- The *Health Disparities Division* provides community outreach, education, seminars, funding, and health promotion campaigns designed to promote improved health to minority and other potentially disparate communities. Staff provide technical

assistance and consultation to state agencies; community and faith-based organizations; and health professionals.

- The *Office of Performance Management* assesses and strengthens public health infrastructure and services to improve health outcomes. The office both engages and assists the department's units in achieving their respective objectives. Strategic planning is critical to the successful implementation of any program or project. It is the office's responsibility to train departmental unit leaders in leadership, management, and quality improvement/performance improvement approaches. The office also has the responsibility to ensure a continuous two-way communication between the leaders and the customers, stakeholders, and employees to inform decision making.
- The *Office of Population Health Assessment* oversees data collection, analysis, and reporting of multiple federal and state public health surveillance systems, including the Behavioral Risk Factor Surveillance System, the Hospital Discharge Data System, the Injury Surveillance System, the Pregnancy Risk Assessment and Monitoring Survey, and the Tennessee Cancer Registry. Additionally, office staff provide data analysis and GIS mapping support to researchers across the department.
- The *Office of State Chief Medical Examiner* is responsible for educating and training county medical examiners, keeping records of deaths investigated by county medical examiners, and assuming investigative authority in cases of interest to the state, including mass fatalities and threats to public health.
- The *Vital Records and Statistics Division* maintains certificates of births, deaths, marriages, and divorces that occur in Tennessee.

The Deputy Commissioner for Operations oversees internal support functions related to

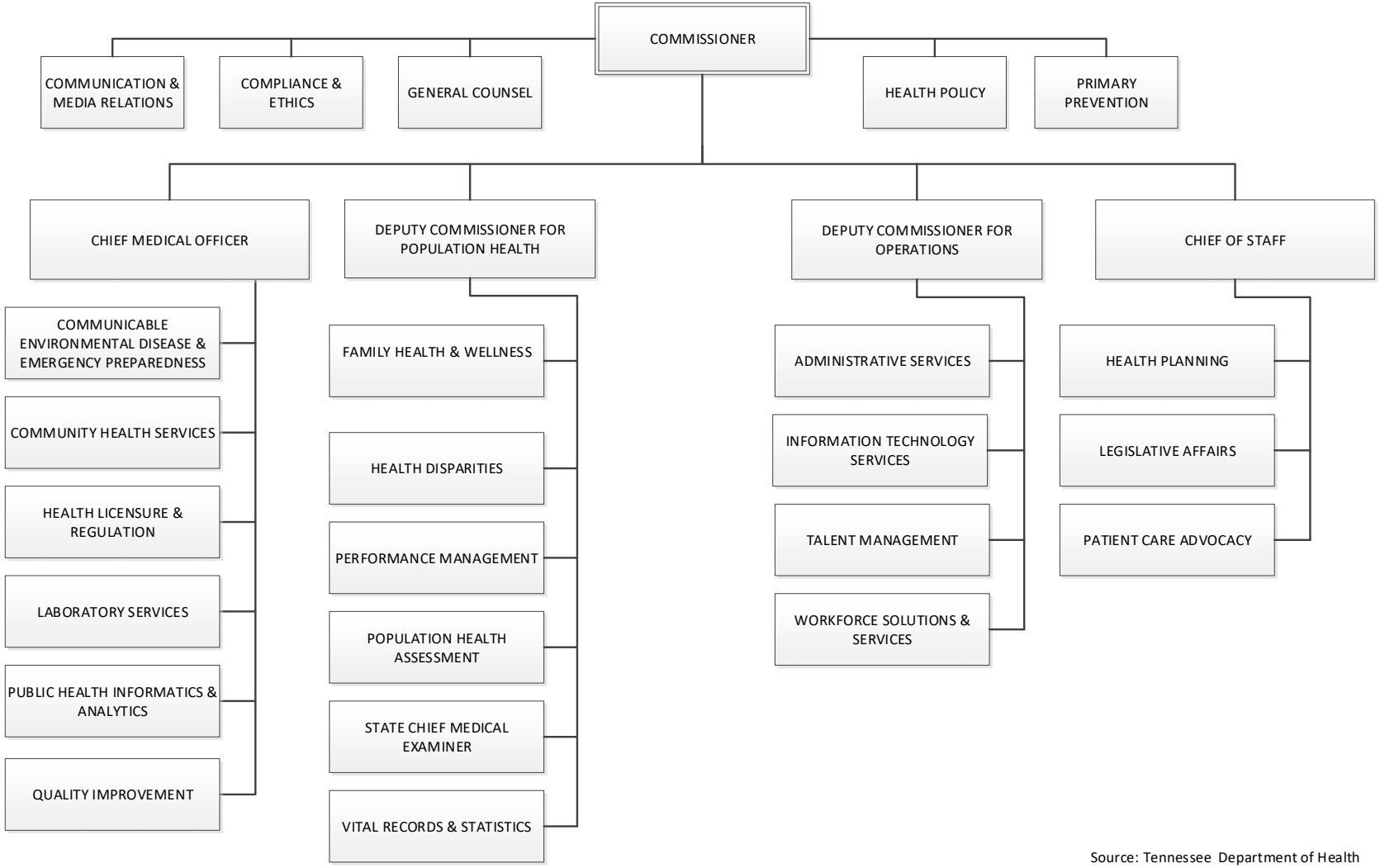
- general administrative services,
- information technology services,
- talent management, and
- workforce solutions and services.

The following units report to the Chief of Staff:

- The *Division of Health Planning* creates Tennessee's State Health Plan based on input from stakeholders across the state, expert analysis of the health challenges, and information collected from a variety of state and national resources to improve both health outcomes and improve the state's healthcare system.
- The *Legislative Affairs Section* works with executive leadership on legislative proposals and advises the department on the viability of legislation and the potential impacts it may have on the department. The section meets with interest groups, tracks bills, and informs health-related boards of any legislation that would impact them.

- The *Office of Patient Care Advocacy* provides assistance pertaining to long-term healthcare matters and responds to inquiries from patients, families, long-term care facilities, hospitals, medical professionals, and public officials.

Tennessee Department of Health
as of July 2018



Source: Tennessee Department of Health

AUDIT SCOPE

We audited the Department of Health and the Genetic Advisory Committee, the Perinatal Advisory Committee, the Traumatic Brain Injury Advisory Council, the Advisory Committee for Children's Special Services, and the Tennessee Medical Examiner Advisory Council for the period of January 1, 2015, to September 30, 2018. Our audit scope included a review of internal control and compliance with laws, regulations, policies, and procedures in the following areas:

- environmental health inspections;
- the HealthCare Safety Net for the Uninsured;
- the nursing home Civil Monetary Penalty Quality Improvement program;
- the Office of the State Chief Medical Examiner;
- the *Joint Annual Report* and the *Hospital Summary Report;*
- health advisory entities; and
- information on the Vital Records Information System Management System, Tennessee health departments, newborn testing, and high containment laboratories and select agents.

Management of the department and the related entities are responsible for establishing and maintaining effective internal controls and for complying with applicable laws, regulations, and provisions of contracts and grant agreements.

For our sample design, we used nonstatistical audit sampling, which was the most appropriate and cost-effective method for concluding on our audit objectives. Based on our professional judgment, review of authoritative sampling guidance, and careful consideration of underlying statistical concepts, we believe that nonstatistical sampling provides sufficient, appropriate audit evidence to support the conclusions in our report. Although our sample results provide reasonable bases for drawing conclusions, the errors identified in these samples cannot be used to make statistically valid projections. We present more detailed information about our methodologies in the individual report sections.

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.

PRIOR AUDIT FINDINGS

REPORT OF ACTIONS TAKEN ON PRIOR AUDIT FINDINGS

Section 8-4-109, *Tennessee Code Annotated*, requires that each state department, agency, or institution report to the Comptroller of the Treasury the action taken to implement the recommendations in the prior audit report. The prior audit report was dated November 2014 and contained two findings. The Department of Health filed its report with the Comptroller of the Treasury on July 14, 2015. We conducted a follow-up of the prior audit findings as part of the current audit.

RESOLVED AUDIT FINDINGS

The current audit disclosed that the department resolved the previous audit findings concerning

- the Office of the Chief Medical Examiner's inability to provide a systematic training program for local officials—including inconsistencies within the statewide system; and
- the Medical Examiner Advisory Council's failure to meet statutory requirements.

AUDIT CONCLUSIONS

ENVIRONMENTAL HEALTH INSPECTIONS

The Department of Health's Division of Environmental Health (the division) regulates food service establishments, public swimming pools, hotels and motels, bed and breakfast establishments, organized campgrounds, tattoo parlors, and body piercing studios. State law authorizes the Commissioner of the department to promulgate rules and regulations and enforce compliance with health standards. The division inspects facilities, issues permits, and conducts complaint investigations to maintain the health and safety of the public. Annually, environmental health specialists are scheduled to perform close to 100,000 inspections in over 40,000 facilities across the state (see **Table 1**).

Table 1
Required Facility Inspections
For Fiscal Year 2018

Facility Type	# of Establishments	# of Inspections	Inspection Cycle
Food Service	28,457	56,914	1-4 inspections per year based on risk
Hotel	1,743	3,486	2 per year
Pool	5,291	27,778	1 per month while in operation
Childcare	3,944	3,944	1 per year
School Building	1,631	1,631	1 per year
Tattoo	481	1,924	4 per year
Camp	640	1,280	2 per year
Body Piercing	217	217	1 per year
Correctional	38	38	1 per year
Bed and Breakfast	84	168	2 per year
Mass Gathering	1	6 205	Mass gathering inspections Food service establishment inspections

Source: Department of Health, Division of Environmental Health.

State statute and department rules[1] specify the frequency of inspections for each facility type, and department rules detail the guidelines for inspections. The division has established inspection zones, which include eight regions (each of which contains several districts) and five metro areas.

Regional Zones

Within each of the eight regions, the district supervisors assign health specialists to a territory and to specific establishments. Health specialists perform inspections as assigned and submit weekly inspection reports to their district supervisors, who then forward reports to the regional managers for review. Each month, regional managers review all inspection reports from the districts and send them to the division's central office.

Impact From Vacancies in Health Specialist Positions

The division has 70 health specialists who are housed in county health departments throughout the state and perform the state's regional inspections. As of July 2018, 4 of those

[1] Rules for specific inspections include the following: food service—Section 68-14-701, *Tennessee Code Annotated,* and Rule 1200-23-1; public swimming pools—Section 68-14-301, *Tennessee Code Annotated,* and Rule 1200-23-5; Homeowner Association pools—Rule 1200-25-1; hotels and motels—Section 68-14-301, *Tennessee Code Annotated,* and Rule 1200-23-4; campgrounds—Section 68-110-101, *Tennessee Code Annotated,* and Rule 1200-1-5; tattoo artists and studios—Section 68-38-202, *Tennessee Code Annotated,* and Rule 1200-23-3; body piercing—Section 62-38-302, *Tennessee Code Annotated,* and Rule 1200-23-6; bed and breakfast—Section 62-14-501, *Tennessee Code Annotated,* and Rule 1200-23-2; mass gatherings—Section 68-112-101, *Tennessee Code Annotated*

positions are vacant. According to division staff, specialist vacancies cause difficulties for the division—vacancies contribute to missed and late inspections and deviations from required inspection cycles. In response to workload demands, regional managers developed a risk matrix that prioritizes inspections for establishments based on their past inspection scores and their inherent operational risk (see **Table 2**). Once the director approves the risk matrix, inspectors can skip past "high performing" and "low risk" establishments until the next inspection cycle and focus on completing inspections for higher risk facilities and facilities with prior poor inspection scores. Food service establishments account for the majority of inspections (58.31%), followed by pools (28.46%), childcare facilities (4.04%), and hotels (3.57%).

Table 2
Risk Category and Corresponding Inspection Frequency for Food Service Establishments

Risk Category	Description	Minimum Number of Annual Inspections
1	Involves very limited food preparation	1 time a year
2	Involves complex cooking/raw food, school cafeterias	2 times a year
3	Demonstrates lack of managerial control by having repeated priority item violations	3 times a year
4	Serves highly susceptible populations or was involved in confirmed foodborne outbreaks	4 times per year

Source: Department of Health, Division of Environmental Health.

Current Process Description

For the majority of the audit scope period, the division's inspection process was manual; health specialists physically visited each facility and prepared paperwork to document the inspection and results. The paper files were submitted to district supervisors, regional managers, and ultimately to the division's central office for processing. This process did not allow the department and the division to quickly and easily determine the status of required inspections. In an effort to improve the process, during 2017, the division began using tablet computers, instead of paper forms, to document inspections, and in summer 2018, all health specialists began using tablets, which keep data in a data repository in a cloud storage system. The new Health Space Inspection application is designed to capture and convert information into a data structure to manage inspections and provide a statewide database of inspection data that is current and up-to-date. However, during our audit, the data was not fully accessible to the division because the department's Information Technology section was still testing the communication process between the tablets and the data repository. We were subsequently told that as of September 2018, the division began using Health Space to document all inspections. Given that the new process was in the testing and implementation phase, we did not audit the new process in this audit.

Metro Areas

The city governments of the five metro areas are comprised of Madison, Knox, Hamilton, Shelby, and Davidson counties. These municipalities conduct all inspections of facilities in the metro areas, which account for roughly 45% of all inspections statewide. Our audit did not include testwork related to metro area inspections.

Audit Results

Audit Objective: Does the division have the ability to readily provide department management and other stakeholders with inspection data and results to ensure compliance with *Tennessee Code Annotated* and department rules?

Conclusion: The division did not have a centralized database of environmental health inspections to facilitate management's quick access to the division's compliance for completion and timeliness of its environment health inspections (see **Observation 1**).

Methodology to Achieve Objective

We interviewed department staff within the Division of Environmental Health and reviewed documentation from the central and regional field offices—including inspections plans, staffing levels, and workload assignments.

Observation 1 – The Division of Environmental Health has taken steps to improve its environmental health inspection process so that management can quickly access statewide inspection data and more easily monitor its compliance with inspection timeliness

The Division of Environmental Health's methods for inspection oversight, tracking, and data management were decentralized and based on manual processes that limited the division's ability to provide Department of Health management with real-time statewide inspection data to facilitate analysis and decision making.

The department should continue to improve its technology capabilities so that management can monitor, capture, and retain reliable inspection data. Because of the large volume of inspections that must be completed each year, the department should review the division's current organizational structure and staffing levels to determine if any changes could produce more efficient, effective, and timely inspections for all establishments. Management should fill vacancies as soon as practical.

Department of Health Comment

Environmental Health (EH) recently developed and deployed an electronic inspection application statewide. All EH staff, including both state and contract county employees began using the newly developed Health Space inspection application exclusively in May 2018. All

routine, regulatory inspections are now made using the app, which provides EH supervisory and management staff complete and timely records of inspections on a daily basis. On September 25 and 26, 2018, the EH supervisory and management staff were trained in how to use the management tools available within the Health Space system. Each supervisor is responsible for records review at least weekly of all work conducted within their district, providing their direct reports and their managers with a record of their review. Additionally, Central Office staff has the ability to monitor and verify EH time accountability and monitor inspection quality and frequency to ensure compliance with laws, rules, and program policies.

We agree with and appreciate the observation. We also agree that the organizational structure should be reviewed and adjusted as needed and that vacancies should be filled as soon as practical. EH staffing workloads are continually monitored to ensure inspections are made at the minimum frequency required by law, rule, and policy. Consequently, individual EH workloads and territories are adjusted within regions, as needed, to best ensure coverage, consistency, and quality inspections.

However, the Environmental Health program does not have the capacity to ensure that territories assigned to positions that have been vacated receive 100% of the required inspections during the time required to hire and train new EH staff to fill vacancies. Therefore, in cases of unexpected vacancies, the regional Field Office Manager or Contract County Director are required to evaluate the vacant territory, as well as the resources available in the district and propose an alternate work plan, where lowest risk establishments will forgo inspections, if necessary, until the vacancy if filled and the newly hired EH is properly trained. The proposed alternate work plans must be reviewed and approved by the Assistant Director prior to implementation. Vacancies are filled immediately, usually within one month. Despite the rapid hiring of new staff, field training of newly hired EH takes at least six months to complete.

HEALTHCARE SAFETY NET FOR THE UNINSURED

Section 71-5-148, *Tennessee Code Annotated*, establishes the HealthCare Safety Net for the Uninsured (safety net). The 2005 statute was a result of a task force created by Governor Bredesen's administration to address changes in TennCare following enrollment reductions. The Department of Health is authorized to expand the state's ability to provide needed medical and dental assistance and services to uninsured adults between the ages of 19 and 64. The legislative intent of the current statute is to prioritize efforts that benefit the greatest number of uninsured adults.

The department receives an annual state appropriation and evenly splits the safety net funds for allocation to Federally Qualified Health Centers[2] (FQHCs), 16 of which are local health departments (LHDs); and community and faith-based clinics (CFBs) provider groups. The department reported fund appropriations for the previous five fiscal years, as shown in **Table 3**.

[2] These are community-based healthcare providers that provide primary care services in underserved areas and, if approved, receive federal Health Resources and Services Agency – Health Center Program funds.

Table 3
Safety Net Appropriations for the Past Five Fiscal Years

Year	Amount Total (in millions)	FQHC (in millions)	CFB (in millions)
2013	$12	$6	$6
2014	$12	$6	$6
2015	$12	$6	$6
2016	$13.5	$6.75	$6.75
2017	$12.5	$6.25	$6.25
Total	**$62**	**$31**	**$31**

Source: *HealthCare Safety Net Update,* issued January 2018, p. 9 and 11. See **Finding 1**.

Safety Net Funding

Each participating safety net provider is allocated a portion of the annual appropriation based on its reported percentage of uninsured medical encounters[3] for individuals between the ages of 19 and 64. Encounters for FQHCs are defined as uninsured adults receiving primary care services. For CFBs, the encounters are defined as uninsured adults receiving primary care services, dental services, or project access[4] services.

Safety Net Providers

Safety net providers are healthcare providers that provide primary, behavioral, and/or dental services to uninsured adults. Participating providers provide the department quarterly reports of the number of encounters served.

Safety net providers are categorized into four types:

- local health departments (LHDs);
- local health departments designated as Federally Qualified Health Centers (LHD-FQHCs);
- community health centers designated as FQHCs that are not local health departments (non-LHD FQHCs); and
- community faith-based clinics (CFBs).

Annual Report

Section 68-1-123, *Tennessee Code Annotated*, requires that

> On or before January 15 of each year, the commissioner of health, in consultation with the department of finance and administration and any other state agency involved in the administration of the

[3] This includes 1) adult patients aged 19 to 64 who are uninsured pursuant to Section 71-5-148(a), *Tennessee Code Annotated;* and 2) unduplicated uninsured adult patients, who are counted only once for each type of service, even if they received services on multiple occasions during the grant period.
[4] Referral services.

safety net program, shall report to the general assembly on data relating to access to care and safety net adequacy related issues. The data shall address adequacy of access and the array of services to which access is available. The report shall also seek to address the allocation of scarce health care resources in the safety net, with attention to developing a rational health care system that does not duplicate services. The report shall specifically assess access to care in rural and underserved areas across the state.

The department's State Office of Rural Health and Health Access within the department's Division of Health Disparities is responsible for preparing the annual *HealthCare Safety Net Update* report.

Provider Payment Process

Through an online reporting tool, the providers self-report quarterly the number of encounters for which they provided primary care services. The quarterly count of encounters reported to the department does not include patient names or any other identifiable information, only a total count served. The department reimburses providers with safety net funds based on its calculation of the percentage of uninsured encounters reported from the total number the participating providers report quarterly to the department. The department reported the following distributions paid to provider groups (see **Table 4)**:

Table 4
Safety Net Fund Distributions
For Fiscal Year 2017

	Number of Encounters	Paid Safety Net Funds	Percentage
FQHC	244,802	$ 6,240,000*	99.84%
CFB	177,133	$ 6,379,380*	102%[5]
Total	421,935	$12,619,380	101%

* Reconstructed and provided by Division of Health Disparities staff on August 10, 2018.[6]
Source: *HealthCare Safety Net Update* report, January 2018. See **Finding 1**.

Table 5 provides a complete breakdown of the different provider groups providing medical services to the uninsured and the number of encounters served. Only the designated FQHC and CFB provider groups receive state safety net funds.

[5] The department has carry-forward funds from previous years, which allowed it to exceed funding appropriations for the fiscal year presented.
[6] The information provided in **Table 4** is based on division staff's reconstruction of year-end payment information. As such, staff had to reconstruct the information from the system using notes from former staff, invoices, and recorded payments. The numbers represent the division's best-guess estimate.

Table 5
Uninsured Adult Medical Encounters
For Fiscal Year 2017 and Five-year Average

Provider Type	FY 2017 Number of Providers	FY 2017 Number of Reported Encounters	5-year Average Number of Encounters	5-year Average Percentage
LHD*	40	92,632	111,606	19%
LHD-FQHC	16	42,733	41,387	7%
Non-LHD FQHC	27	202,069	238,006	41%
CFB	71	177,133	183,052	32%
Total	**154**	**514,567**	**574,050†**	**100%**

* Local health departments are not registered as FQHCs and do not receive federal funding or safety net funding.
† We found the total encounters reported in Table 5 of the *HealthCare Safety Net Update* for fiscal year 2013 was incorrect. A correction was made to calculate the correct average total.
Source: *HealthCare Safety Net Update,* January 2018, p. 7. See **Finding 1.**

Department's Responsibilities for Procuring Providers

The department's State Office of Rural Health and Health Access (the office) within the department's Division of Health Disparities (the division) is responsible for creating contract proposals in consultation with the department's Procurement Management Office. The division's program director is responsible for choosing the contract authorization format and classifying the initial contracting relationship as vendor or subrecipient, including the terms and conditions of the contract. The contract authorization proposal is sent to the Procurement Management Office for review and approval. Once the department approves the proposal, it is forwarded to the state's Central Procurement Office (CPO) for review and approval.

CPO is housed administratively within the Department of General Services; CPO performs its procurement responsibilities independent from departmental oversight. Procurement personnel responsible for procuring the state's goods and services include the Chief Procurement Officer and all persons acting on his behalf, whether such persons are located in the CPO, within a state agency, or under a delegated authority. The Chief Procurement Officer has the authority to enter into contracts on behalf of other state executive agencies and to manage all procurement solicitation types. All procurement duties promulgated in state statute, including the central purchasing authority for goods, nonprofessional services, and professional services for the State of Tennessee, are the responsibility of the CPO.

The Comptroller's Office of Management Services (OMS) reviews all state contracts and procurements at various levels. While some contracts and procurements are sent to OMS through the Edison[7] workflow, these contracts and procurements do not require a statutory

[7] Edison is the state's statewide enterprise management system.

review by OMS. In these circumstances, OMS performs a perfunctory review to move them forward in the Edison workflow. Without OMS approval, the contracts and procurements would remain in the OMS queue, and responsible state entities would be unable to process and finalize them. OMS' perfunctory review may be different depending on the type of contract or procurement; in some cases, it ensures a transaction is between two agencies, and in other cases, it checks for obvious errors. When OMS detects errors, the contract or procurement is sent back to the initiating agency or department for corrections. When OMS staff's approval is considered perfunctory, the Edison system attaches a comment stating:

> Approval of the procurement even on behalf of the Comptroller is perfunctory. It shall not be construed that the procurement event was reviewed for merit or approval nor shall it be construed that the data entry function into the Edison system was reviewed or approved. The accuracy of the data entry function and resulting documents remains with CPO.

Department's Responsibilities for Monitoring Providers

Grant Contracts

Section 9.2 of CPO Policy 2013-007, "Grant Management and Subrecipient Monitoring Policies and Procedures," requires state agencies to submit an annual subrecipient monitoring plan to CPO for review and approval by October 1 of each year. If a state agency subsequently makes changes to a CPO-approved subrecipient monitoring plan, the agency must also submit the revised plan to CPO for approval.

During our audit period, the department's Compliance and Ethics Division was responsible for subrecipient monitoring of grant contracts. The department's subrecipient monitoring team submits an annual plan to CPO for review and approval. The four-member team reportedly issues 140 to 150 monitoring reports per year.

Vendor Contracts

Division program managers are responsible for monitoring vendor contracts for compliance. Vendor monitoring is focused on the department ensuring that vendors perform the contract requirements and meet contract terms.

Audit Results

1. **Audit Objective:** Did the department prepare and submit the annual *HealthCare Safety Net Update* report for fiscal years 2015, 2016, and 2017?

   Conclusion: The department did submit its annual safety net report timely, with the exception of fiscal year 2015. Due to the lack of supporting documentation, we could not determine if the department reported accurate, consistent, and verifiable information in the annual reports (see **Finding 1**).

2. Audit Objective: Did the department monitor all safety net provider contracts?

Conclusion: We found that the department did not execute provider contracts in accordance with state policies and did not monitor all safety net providers (see **Finding 2**).

Methodology to Achieve Objectives

We interviewed program management about safety net program details, reviewed *HealthCare Safety Net Update* reports for fiscal years 2012 through 2018, and analyzed report data. We reviewed the department's reconstructed medical encounter and grant payment support information for fiscal year 2017 and compared it to reported information. We reviewed state statutes related to the safety net program, the department's program and subrecipient monitoring guidelines, and examples of recently completed department monitoring reports of community and faith-based providers.

We reviewed examples of department-executed provider contracts for fiscal years 2015 through 2019 for the safety net program. We also reviewed CPO's procurement and procedures manual, as well as CPO Policy 2013-007, "Grant Management Policy Guidelines," which include *Code of Federal Regulations* guidelines for vendors and subrecipients. We consulted with CPO staff and OMS staff concerning contracting methods and processes.

Finding 1 – The department was unable to provide verifiable supporting documentation for the *HealthCare Safety Net Update* reports and did not include pertinent information related to the use of program funds

The State Office of Rural Health and Health Access was not able to fulfill our request for supporting documentation so that we could verify information in the annual *HealthCare Safety Net Update* reports. The office has no formal written policies and procedures that outline the duties and responsibilities for preparing the report. According to management, the staff member responsible for tracking and compiling the information used in the report retired June 2017, and top management did not ensure this function continued as required. Also, upon his departure, the employee did not transfer supporting documentation and other necessary process information to the appropriate management or staff. Without supporting documentation or written policies and procedures, the Department of Health cannot ensure consistent and accurate reporting.

Furthermore, during our review of the reports, we found that the annual reports do not include either the amount of safety net funds paid to each provider or any unspent fund balances that were not utilized during the year. Without knowledge of how funds were spent or funds remaining, the department has not informed the General Assembly of pertinent safety net information for future decision making.

Recommendation

The department has a responsibility to provide complete, accurate, and supported information on safety net funding to the General Assembly.

Management's Comment

We concur. Although the State Office of Rural Health and Health Access prepared the 2015 annual report, the report was not posted to the tn.gov website in January 2016 as required. This oversight was noted in spring 2016 and corrected when the report was posted to the website.

Prior to 2017, program staff received quarterly reports submitted by grantees and manually entered the number of encounters for each quarter onto separate Excel spreadsheets from which annual totals were calculated. This process became even more complicated with a change to the payment methodology in 2017 when the basis for payments was changed for community and faith-based providers from a flat fee per encounter to a payment that varied from quarter to quarter, based on the percentage of encounters reported for that quarter. A change in program personnel made it difficult to validate the numbers for years preceding 2016. Additionally, numbers for medical encounters were not reported consistently in the *HealthCare Safety Net Update* report from year to year, with some years excluding the numbers of medical encounters reported by Local Health Department (LHD) FQHCs from the total FQHC medical encounters.

Corrective Action Plan:

a. The 2015 Annual Health Access Safety Net Report was posted to the website in spring 2016.

b. Safety Net program staff has developed and implemented standardized tools and procedures, as follows:

- Beginning with fiscal year 2017, previous and current payment methodologies have been documented, and the current methodology is designed to ensure that all budgeted funds are expended for services performed during the quarterly period of performance and reimbursed based on the percentage of total encounters for that quarter, thus eliminating the need for adjustments at year-end.
- Beginning in fiscal year 2017, a single spreadsheet has been used to compile all encounter data reported by safety net providers into one comprehensive spreadsheet, which allows for documenting, tracking, and comparing quarterly encounters and payments to cumulative year-to-date actual expenses and budget.
- Since 2017, program staff responsibilities have been segregated to improve quality assurance, as follows:
    - i) the information specialist receives quarterly reports and enters quarterly report data into a standardized spreadsheet;

ii) an administrative assistant calculates payments based on the quarterly encounter data, enters that data into the reporting spreadsheet, and prepares invoices for payment;

iii) the program director reviews data before authorizing processing of invoices for payment; and

iv) an administrative assistant archives copies of the reports, spreadsheet, and invoices in both hard copy and digital format.

c. The format and content of the annual report has been reviewed by office and division-level leadership in September 2018, and a template for the annual report developed to ensure consistency in content and format from year to year. This template has been used to prepare the 2018 report, with attention to data presented in graphic format and the process for authorization and publication of the report.

d. Staff has received training in process mapping. Process maps are being developed for each step of the process, including

i) applying, confirming eligibility, and approving safety net providers wishing to participate in the program;

ii) developing, approving, executing, and archiving contractual agreements;

iii) receiving, processing, and archiving quarterly reports submitted by safety net participants;

iv) calculating and processing invoices and payments;

v) monitoring compliance through site visits, records review, and internal audits;

vi) evaluating and reporting impact through annual reports and other publications; and

vii) collecting and using customer feedback for continuous improvement.

Finding 2 – The department and the Central Procurement Office did not ensure that contracts with providers were proper and in accordance with state procurement policies; furthermore, the department was not monitoring all provider contracts, and its monitoring procedures were deficient

Contracts Were Not in Accordance With State Policies

Section 4-56-105(4), *Tennessee Code Annotated*, assigns the Chief Procurement Officer with the responsibility to

> **(4)** Develop proposed rules and regulations, policies, standards and procedures consistent with this chapter and title 12, chapters 3 and 4 and approved by the commission that establish:

(A) A central procurement process with opportunities for strategic sourcing;

(B) A central contract management process;

(C) A central grant management process that will assist agencies in identifying grant opportunities and provide for a central database of information regarding grant recipients and sub-recipients for monitoring purposes;

(D) A central performance and quality assurance process that assists agencies in identifying risk areas and recommending contract performance and management best practices; and

(E) A central bidder relations management process to include a central bidder registration database and program for conducting business with the state, which provides bidders and vendors with training and assistance with technical matters, procurement notification, and contract and grant awards.

To determine that the Department of Health had appropriately monitored its safety net provider contracts, we gained an understanding of the provider contract process. We found that the department had incorrectly designated federally qualified health center (FQHC) providers as vendors and improperly utilized an endowment grant contract[8] to administer program funds from 2005 to fiscal year 2016. Additionally, for fiscal year 2017, the department changed these FQHC provider contracts to a delegated grant authority,[9] but the department once again incorrectly used endowment grant contracts instead of the appropriate cost reimbursement grant templates as required.

In an effort to determine the breakdown in the contract process, we reviewed some of the executed endowment contracts and found that the required review process included approvals from the department, the Chief Procurement Officer, and Comptroller Office of Management Services (OMS) staff. Based on our discussions with the Central Procurement Office (CPO) grant management staff, CPO indicated that FQHC providers for the safety net program did not meet the definition of an endowment recipient or vendor and were, in fact, subrecipients of the program.

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[8] An endowment grant is used to transfer funds to a grantee through a statutory appropriation by the General Assembly. CPO management explained that there needs to be a specific appropriation by the legislature to use such a grant. Contrarily, a direct appropriation grant is one that is listed on the Department of Finance and Administration – Division of Budget's annual direct appropriation list. CPO mentions in its Policy 2013-007, "Grant Management and Subrecipient Monitoring Policy and Procedures," that direct appropriation grants are exempt from the policy; however, endowment grants are subject to the policy and its requirements and provisions.

[9] As defined in the CPO Procurement Procedures Manual, a "delegated grant authority" means a state agency has received approval, in accordance with CPO Policy, to issue grants for an individual program within specified limits and guidelines.

We expanded our review of contracts and found that for fiscal years 2018 and 2019, the department executed FQHC provider contracts based on an approved delegated authority (DA)[10] for purchase orders. We also found that beginning in fiscal year 2018, the department reclassified the community and faith-based clinic providers as vendors instead of subrecipients and transitioned them to the same purchase order DA used for FQHCs.

As a result of the changes, the department distributed safety net program funds through purchase order agreements to both types of providers, instead of using a proper delegated grant authority pro-forma contract template with the non-governmental cost-reimbursement template being used for all individual contracts issued under the delegated grant authority. CPO grant management staff explained that the CPO sourcing analyst reviewing the recently proposed community and faith-based providers (CFB) DA should have realized the proposal contained "grant" and "grantee" language, which should have alerted them of the improper contract template. Based on discussions between the parties, both CPO and OMS staff agreed that purchase order agreements were not appropriate for executing the safety net program agreements. Additionally, the purchase order agreements' terms and conditions did not provide the department with a complete, defensible contract that would eliminate risks to the state.

Department's Explanations for Contract Format Changes

According to department management, management was attempting to address funding concerns for CFBs to achieve a more equitable and administratively expedient funding process. Prior to the contract changes, the CFB providers were considered subrecipients and were allotted a certain contract maximum liability amount each fiscal year to provide medical services to uninsured adults. Some CFB providers would use all allotted funding before the contract year had ended, while other CFB providers would have unused funding at the end of a contract year. As a result, the department had to amend the existing provider contracts to shift funding to other CFBs, which was a lengthy and time-consuming process. According to the program director, staff who initially classified FQHC providers as vendors were no longer at the department; therefore, current staff maintained FQHCs as vendors because of how it was done previously.

Impact of Improper Contract Formats

Because the department classified these two safety net fund provider groups differently, CFB providers, classified as grant subrecipients, were subject to program and subrecipient monitoring, while FQHC providers, classified as vendors, were not subject to subrecipient monitoring. As vendors, the FQHCs should have been monitored for contract compliance. We learned that neither the department's program staff nor the Compliance and Ethics Division's staff performed any subrecipient or contract compliance monitoring of the contracts for FQHC providers receiving safety net program funds.

[10] As defined in the CPO Procurement Procedures Manual, a "delegated authority" is a written document, approved in accordance with CPO Policy, that authorizes a state agency to award a grant, make a loan consistent with a grant, or procure goods or services on behalf of the state.

Contract and Subrecipient Monitoring Was Not Performed

Policy 2013-007 of the CPO's Grant Management and Subrecipient Monitoring Policy and Procedures establishes guidelines for controls over federal and state grant awards to subrecipients. The policy requires that agencies awarding grants must monitor subrecipients once every three years. Agencies may determine whether the receiving entity is a subrecipient or a contractor (vendor) on a case-by-case basis, depending on the nature of the grant contract relationship. In accordance with federal guidelines, the policy provides that characteristics that support classifying an entity as a subrecipient include the entity using state or federal funds to "carry out a program for a public purpose specified in an authorizing statute as opposed to providing goods or services for the benefit of the State Agency." Based on policy, it is required, and generally accepted good practice, to monitor subrecipients of programs to mitigate risks of abuse.

According to CPO grant management staff, while the department makes the initial determination whether an entity is a subrecipient or a contractor (vendor), CPO makes the final determination. Based on our discussion with CPO grant management staff, both FQHC and CFB providers are considered subrecipients and were required to be included on the department's annual subrecipient monitoring plan for CPO's review and approval. However, according to the department's safety net program and internal audit staff, the department only performed subrecipient monitoring for CFB providers because the FQHC providers were not classified as subrecipients.

When the responsible state agency does not monitor provider contracts, the state has no assurance that all contract requirements have been met and that funds have been used to help uninsured adults throughout the state. We met with the department's Procurement Management Office staff, CPO grant management staff, and OMS contract staff to discuss the procurement and monitoring issues identified above. All parties agreed that corrective actions were necessary, and all parties were developing corrective action plans. As part of our next audit of the department, we will follow up on the corrective action.

Weaknesses in Subrecipient Monitoring Procedures of the CFBs

From our review of the Division of Health Disparities' monitoring guides and instruments, which program monitors use to monitor the CFB providers, we found a deficiency in the methods for validating the medical encounters submitted to the department for reimbursement.

Because the department does not require source documentation,[11] such as a detailed invoice before payment to providers, or a reconciliation to support the reported encounters, monitors must obtain their populations from an unreconciled patient list pulled from the register once on-site. The quarterly count of encounters reported to the department does not include patient names or any other identifiable information, only a total count served.

[11] A source document is the original record containing the details to substantiate a transaction entered in an accounting system.

Our review of prior monitoring reports found that the department issued findings to CFB providers based on its monitoring efforts. The prior monitoring reports indicated that the department paid providers for encounters that did not qualify as program eligible. Deficient monitoring procedures provide an opportunity for fraud or errors to go undetected and reduce the safety net funds available for those the program is intended to assist.

Recommendation

Chief executives of each state entity should take direct responsibility for ensuring that their entity's respective subrecipient and vendor contracts are properly issued, monitored, and managed. Regardless of the contract form, the department is required to monitor subrecipients and vendors to ensure all grant and vendor contract requirements are met and that the department only pays for the services delivered.

The department's program and procurement management should continue to work with CPO to ensure that

- all contracts are properly classified as subrecipient or contractor (vendor) relationship;
- departmental program and procurement staff responsible for creating and approving contract proposals are adequately trained on state procurement policies and procedures;
- the department's subrecipient monitoring plan is complete and includes all subrecipients with the appropriate risks identified; and
- for current agreements in place, revised terms and conditions are executed with providers.

Furthermore, the department should include in terms and conditions of provider contracts that providers must maintain a reconciled list of the quarterly patient encounters reported, including names or identifiers. Monitoring procedures should include a review of these reconciliation reports to obtain samples to verify reported medical encounters.

CPO should continue plans to improve its review process of agency authority requests to detect errors within the requesting authority's documentation.

Managements' Comments

Department of Health

We partially concur. We agree that the department did not annually perform site visits for all 99 safety net providers. We disagree that the department did not execute provider contracts in accordance with state policies.

In fiscal year 2015, the Central Procurement Office (CPO) required that the department discontinue use of individual endowment grants, which had been used as the contracting vehicle

for FQHC safety net providers since inception of the program in 2006. Accordingly, the State Office of Rural Health worked with the department's Procurement Office to determine which contracting vehicle would be most feasible for successful execution by program staff and grantees. A key consideration was the wide variability of patient encounters and payments to providers from quarter to quarter, which would mean that contracts would have to be amended frequently to accommodate payment methodologies based on the percentage of encounters each quarter.

Additionally, the program's limited staff capacity to monitor approximately 100 safety net contracts and these frequent budget amendments was of concern. As a result, the preferred contracting vehicle was identified as a delegated authority contracting model, with its lesser reporting requirements designed to minimize the administrative burden on both contractors and program staff. Program staff worked proactively with internal auditors to transition monitoring responsibilities to program staff and to address the unintended consequences arising from limited staff capacity to conduct fiscal monitoring. The department drafted and submitted a proposed vendor agreement to CPO, which authorized the use of the proposed vendor agreement. The department followed all departmental and state-level policies and procedures during this process; and CPO as the state authority approved the current process. Therefore, the department disagrees with this finding.

Since the inception of the safety net program, the program staff has conducted site visits for the purpose of monitoring compliance with safety net programmatic requirements, visiting community and faith-based safety net providers at least once in a three-year cycle. Additionally, internal auditors from the department audited financial records maintained by community and faith-based safety net providers; however, FQHCs, as previously funded through individual endowment grants, were not required to allow site visits or audits of financial records. With the change to a delegated authority contracting model, internal auditors ceased to audit financial records for community and faith-based providers, and program staff assumed responsibility for reviewing both programmatic and financial documentation, in addition to conducting site visits and audits for FQHCs. However, the retirement of the Safety Net Program Director and the limited capacity for other program staff to conduct these site visits and audits did result in failure to monitor in accordance with requirements for audits of programmatic and financial records for all safety net providers in fiscal year 2017.

Corrective Action Plan:

a. The department will continue to work with CPO to determine how to meet expectations for contractual requirements that are feasible, given the constraints of program staff and grantees to manage highly variable conditions for payment that would result in unreasonable administrative burden for budget revisions and/or amendments, likely resulting in delayed services to grantees.

b. The program staff has initiated the process to fill the vacancy in the position of Safety Net Program Director and expects to fill the position by December 15, 2018, with a person qualified to ensure compliance with both programmatic and financial requirements. Program staff has initiated and will complete fiscal year 2019 monitoring site visits—including review of programmatic and financial documentation for 5% or 30

patient encounters, whichever is higher. Program staff plans to conduct a webinar for FQHCs in November 2018, to inform them of the requirements under vendor agreements for site visits and documentation review. Fiscal year 2019 site visits will be initiated in January 2019 and led by the new Safety Net Program Director, who will use a standardized checklist, developed by program staff with advisement from departmental internal auditors, to record and report results of the site visit outcomes.

Central Procurement Office

We concur that the Department of Health did not follow the CPO's rules, policies, and procedures, when it submitted non-compliant documents for review. Because of this, the CPO concurs that its reviewer erroneously approved the non-compliant documents as part of its review.

The CPO has established policy that prescribes the proper grant contract template to utilize. As indicated in the finding, the department did not use the correct contract template. This deviation resulted in the contracts not being reviewed by the CPO's Grant Management Program.

The FQHC DA (which is only used for fee for goods or services contracts and which is not reviewed by the CPO's Grant Management Program) did not mention the words "grant" or "grantee," and there was no indication that FQHC was a grant program. While reviewing the CFB DA, the CPO sourcing analyst inadvertently missed the pertinent paragraph that contained the words "grant" and "grantee."

The CPO also submits that the final determination of whether an entity is a subrecipient or contractor (vendor) is not resolved by the CPO; rather the designation is decided by the department. The CPO merely advises as to the proper classification based on the balancing test of factors contained in Title 2, *Code of Federal Regulations,* Part 200, Section 331. The CPO provides guidance as to the application of these factors. Further, the CPO does not have the authority to deny the department's proposed classification.

Corrective Action Plan

CPO's Grants Program will continue providing grant review training to any CPO staff member that reviews grants. Since the end of 2017, the Grants Program Manager has provided 5.25 hours in contract review training to CPO staff and 30.5 hours in grants training to state agencies. Additionally, a repeatedly addressed segment of that training included the differences between DAs and DGAs and when to utilize each template. This training most recently occurred in September at the CPO's monthly Collaborative User Group meeting. All agencies were encouraged to attend in person, and this topic was specifically addressed via the PowerPoint presented at the Collaborative User Group Meeting and subsequently emailed to all agencies for their own edification. Additionally, instructions of how to use the template are included in each template, and there are grants training PowerPoints available on https://www.tn.gov/finance/grants-information-sharing/grants-information-sharing/training-opportunities.html.

Currently, the CPO and the department have quarterly meetings to address anything of concern and discuss upcoming contracts. Additionally, the CPO is in the process of creating Process Improvement Meetings with its largest client agencies, including the Department of Health, which will serve to incorporate additional training, to provide additional guidance to agencies about ways to improve their contract submissions, and to answer questions about resolving programmatic questions.

NURSING HOME CIVIL MONETARY PENALTY QUALITY IMPROVEMENT PROGRAM

The Centers for Medicare and Medicaid Services (CMS), which is part of the U.S. Department of Health and Human Services, administers the Civil Money Penalties (CMP) for Nursing Homes Program. CMS generates funding for the program by assessing monetary penalties against the state's CMS-certified nursing homes, through the Department of Health's surveyors,[12] who perform inspections and identify and report deficiencies to CMS. CMS reviews the reported deficiencies and determines what federal civil penalties to impose. Nursing homes must remit payments to CMS, which then returns 90% of the collected CMP funds back to the state. These funds are placed into the state's General Fund Reserve for the department's Civil Monetary Penalty Quality Improvement (CMPQI) program.

Until 2011, the department's use of CMP funds was limited to activities like relocating residents from nursing homes that were decertified due to noncompliance. According to the department, in late 2011, CMS began to urge states to use these funds for other purposes. New provisions in the federal 2010 Affordable Care Act brought about changes to the Medicare and Medicaid programs. The federal government published a final rule in "Medicare and Medicaid Programs: Civil Money Penalties for Nursing Homes," Title 42, *Code of Federal Regulations,* Part 488, Section 433, on March 18, 2011. The new rule, effective January 1, 2012, revised and expanded the current regulations regarding using and collecting CMPs. The regulation requires CMP funds to be used to support activities that benefit nursing home residents' quality of care or quality of life, including

- helping support and protect residents of a facility that closes or is decertified, including the cost of relocating residents;
- supporting resident and family councils and other consumer involvement in ensuring quality care in facilities;
- improving facilities, including training facility staff or providing technical assistance for implementing quality assurance and performance improvement programs;
- appointing temporary management firms; and

[12] The Department of Health is designated by contract as the survey agency for CMS. The department's surveyors inspect nursing homes that participate in the CMS reimbursement program to ensure compliance with federal regulations. Inspection findings are reported to CMS, which makes the final determination on deficiencies. See the department's *Report to the General Assembly: Nursing Home Inspection and Enforcement Activities,* p. 6.

- enacting other activities approved by CMS.

The regulation also requires states to

- maintain an acceptable use plan, approved by CMS, for the use of CMP funds, including how the state will solicit, accept, and monitor projects and how it will disseminate to the public information about the use of these funds, including dollar amounts awarded, grantee recipients, project results, and other information; and
- annually award a reasonable amount of funds, minus an amount held in emergency reserve, for the specified purposes of the regulation.

Low-performing Facilities

There are 39 one-star and 71 two-star facilities currently operating in Tennessee, for a total of 110 lower-performing nursing homes. CMS tracks nursing home performance information, which the department can use to target facilities, and encourages them to apply for funds that may help them improve.

Source: https://data.medicare.gov/Nursing-Home-Compare/Star-Ratings/ax9d-vq6k/data, accessed May 10, 2018.

The regulation also establishes that if CMS finds the state has not spent CMP funds accordingly, has not used the funds to benefit the life and care of residents, or has not maintained an approved acceptable use plan of the CMP funds, then CMS may withhold future disbursements until compliance is established.

As of March 31, 2018, the state's fund contained more than $29 million. The state's available federal CMP funds have grown by an average of $2 million annually since fiscal year 2013. Based on figures reported in the department's March 2018 *Transparency Report*, we calculated an average of $184,244[13] was spent annually between fiscal years 2013 and 2018. This is an estimated 1%[14] of available funds. For fiscal year 2018, the department had 6 approved projects with a total award amount of $815,340.

Funding Priorities

The department's Patient Care Advocacy Office staff described actions taken to increase program activity (see **Appendix 1**). In December 2017, the department's management, in conjunction with the Commissioner of Health, set a goal to increase the yearly amount of funding awarded to $5 million by 2023. The department included this in its March 2018 *Civil Monetary Penalty Quality Improvement Program: Strategic Allocation Plan,* which is awaiting CMS review. The proposed strategic plan suggests Tennessee follow a Quality Assurance Performance Improvement approach that uses multiple clinical measures to target

- healthcare-associated infections,
- emergency preparedness,

[13] These are figures reported by the department.

[14] Auditors calculated this estimate, considering the $5 million in available funds that the department holds in reserve for emergencies, as mentioned in the department's strategic plan.

- preventable hospitalizations,
- improvement of nursing home facilities' CMS star ratings, and
- clinical outcomes associated with CMS' 13 Long-Stay Quality Measures.[15]

Application Process

Under the current process, the department posts a Request for Application each quarter to solicit project proposals for the department's CMPQI program. CMS requires project applications to first pass a state review that involves successfully completing a three-tier review process before the application is submitted to CMS, which has final approval authority. Once CMS approves the review, the department enters into a grant contract agreement with the applicant. Eligible applicants include any type of entity, as long as the proposed project adheres to CMS guidelines and benefits or improves the care or lifestyle of nursing home residents.

Audit Results

Audit Objective: Is the department awarding projects from the Civil Monetary Penalty Quality Improvement program?

Conclusion: While some project proposals are approved, grant awards have not kept pace with the program's increasing fund balance (see **Observation 2**).

Methodology to Achieve Objective

We interviewed department staff. We contacted nursing home administrators from a population of 316 certified nursing homes and chose a random sample of 10 licensed, certified nursing homes from across the state. The nursing homes we selected included all levels of quality rankings. We also reviewed federal CMS guidelines, department transparency reports, and strategic plans, and we analyzed information on the department's approved and denied project applications.

Observation 2 – The Commissioner and the department's Patient Care Advocacy Office should continue efforts to bolster the use of Civil Monetary Penalty funds to benefit the state's nursing home residents

According to the Department of Health's *Transparency Report,*[16] it expended 1% of the program funds ($239,859 of $26,653,629) for fiscal year 2017, and 6 projects were carried forward for fiscal year 2018. These projects were budgeted to expend $815,340 of an available $28 million (3%) in CMPQI funds. The department provided a list of project applications it received as of April 2018, which indicated that only 11 of 44 project applications submitted

[15] Long-Stay Quality Measures are quality measures related to patients in a facility longer than 100 days, such as assistance required with activities of daily living, ability to move independently, and falls with a major injury.
[16] This report was released in December 2017.

(25%) had received final Centers for Medicare and Medicaid Services (CMS) approval for funding since the CMS approved the department's initial strategic plan in 2012.

From our review of the January 2018 Request for Application (RFA) period, the department failed nine project applications because it did not pass the initial application process (see **Appendix 2**). CMS was evaluating two other projects for the RFA period but had not yet made a final determination.

We also evaluated the December 2017 and March 2018 *Transparency Reports* and found that the department expended an average of $184,244 (1%) of available CMPQI funds per year.[17] Based on the provided list of applications received by the department, we found that applications that are approved by the department are also approved by CMS approximately 69% of the time (see **Table 6**). With less than five years remaining, it may prove difficult for the department to meet its desired goal for funding $5 million in grant awards annually.

Table 6
Civil Monetary Penalty Program Application Results
Applications Reviewed May 2014 Through April 2018

Results	Number	Percentage
Total Applications	44	
Applications approved by department	18	**39%**
Applications denied by CMS after department approval	5	**31%**
Applications approved by both the department and CMS	11	**25%**
Percentage of applications approved by CMS after department approval	(11/16)	**69%**

Source: Civil Monetary Penalty Quality Improvement Program staff.

Informational Interviews With Nursing Home Administrators

We contacted 10 administrators from a random sample of nursing homes to gauge awareness about the state's CMPQI program and to gain perspective on the availability and practicality of using program funds. We determined that while there appears to be interest among nursing homes in using CMPQI funds to improve patients' quality of care and quality of life, there also are several barriers—both actual and perceived—that prevent eligible facilities from applying for and receiving funds. Nursing home administrators reported the following barriers and suggestions for nursing homes:

[17] We calculated this number based on figures reported in the department's *Transparency Reports*. The average is based on reported expenses and available CMP funds for fiscal year 2013 through March 2018. The average includes the department holding $5 million per year of available funds in reserve for emergencies, as required by CMS and as stated in the department's recent strategic plan.

Barriers Reported by Nursing Home Administrators

- Current federal and state quality improvement requirements already take a great deal of staff time, and adding an optional project to the mix would be difficult. It could potentially require hiring additional staff just to deal with the award requirements.
- Corporate requirements at some nursing homes also place time demands on nursing home staff.
- Some nursing homes have little incentive to apply for funds because they have never had civil penalties imposed.
- Applying for CMPQI funds would take time and resources without any guarantee the funds would be awarded, so administrators do not risk expending resources on potentially unfruitful investments of resources.
- The timing allowed to get a submission ready and provide the necessary information for a successful application is unrealistic.
- Some nursing homes reported uncertainty about the application process, reporting requirements, and tracking requirements if funds are awarded.
- If monitoring of funded projects is included for awards, that could be seen as an additional survey (inspection), when homes are already regularly inspected by the state and accrediting agencies.

Suggestions From Nursing Home Administrators

- The nursing homes can use the funds to deliver free large-group trainings for lower-level staff and supervisors, similar to training offered to administrators and directors of nursing by professional organizations. Training should focus on things like infection prevention and dementia care. This would have a positive impact because it is difficult for administrators and directors of nursing to bring the quality of training available at professional organizations' meetings back to the facility and pass it on to the staff in the same way.
- The Office of Patient Care Advocacy staff should provide training on how to complete a successful application, including examples of applications that have been approved and those that have not. Such training would help encourage more nursing homes to apply by giving them confidence that their applications would be approved.
- Office staff should provide nursing homes direct assistance with the application process.
- Office staff could also provide assistance in understanding exactly what the funds can be used for. It can be confusing to determine what types of projects might be allowable compared with the initiatives nursing homes are already required to do with existing resources.

When perceived or actual program barriers exist, the department may be impacted by limited project application submissions. As a result, the state's lower-performing nursing homes

may not take advantage of this tool to improve the quality of care and quality of life for their residents and may miss out on opportunities to improve their CMS ratings.[18] In addition, the state may miss out on an opportunity to improve its 31st national ranking according to the federal benchmark.[19] Failure to award projects will also result in the department's program fund balance continuing to rise, leaving resources unused for their intended purposes.

The Office of Patient Care Advocacy should continue to increase outreach efforts, with an intensified focus on reaching out to low-performing facilities. These efforts should include training facilities on completing successful applications, which may include performance measurement, types of projects that CMPQI funds can be used for, and the overall application process.

Management should also consider using some of the funds to follow the recommendations of the nursing home administrators we interviewed and explore ways to offer free training to nursing home staff and supervisors on quality of care issues. This training should be similar to the training offered at stakeholder group meetings that upper-level management attend, including evidence-based practices such as caring for patients with Alzheimer's and preventing healthcare-associated infections. Management should continue to explore new ways to reach out to the nursing home community to ensure that all are aware of the availability of funds and receive instruction on how they can successfully apply for and use these funds. Management should also develop new methods of engaging poorly performing facilities.

Finally, management should continue and increase efforts to connect higher education institutions that need research projects for graduate students with nursing homes that need improvement. This will help reduce the burden on nursing home staff to guide, monitor, and measure results from projects designed to improve resident outcomes.

Department of Health Comment

We agree and appreciate the observation. When the programmatic functions first moved from the Office of Healthcare Facilities to the Office of Patient Care Advocacy in November 2017, two staff members were appointed and developed the 2018 CMPQI Strategic Plan. Programmatic efforts were focused on three program areas: building relationships, sharing best practices, and utilizing data to target efforts.

The first Tennessee CMPQI Advisory Committee, consisting of long-term care stakeholders from across the state, was formed to serve as a link between the Tennessee

[18] The office uses several quality care measures, such as the CMS Five-Star Quality Rating System, to target low-performing nursing homes. CMS created the rating system to help consumers, as well as their families and caregivers, compare nursing homes more easily. CMS assigns each nursing home a rating between one and five stars. Nursing homes with five stars are considered to have "much above average" quality, while nursing homes with one star are considered to have quality "much below average."

[19] CMS' National Nursing Home Quality Care Collaborative Initiative developed a quality measure known as the composite score, composed of 13 clinical measures. The composite score measures quality on a systems perspective (6 and under indicates better performance on the national composite score benchmark). As of April 2017, Tennessee was ranked 31st nationally for the percentage of nursing homes that have met CMS' goal of having a composite score of 6 or lower.

Department of Health CMPQI program and the Tennessee nursing home community; to share current events occurring within respective member organizations that may advise CMPQI program efforts; and to provide feedback on the annual CMPQI Strategic Plan to best meet the needs of nursing home residents in Tennessee.

The CMPQI staff members shared information about the funding opportunity with approximately 543 nursing home care partners, including nursing home administrators and senior staff, through the Office of Healthcare Facilities Provider trainings. Overall, staff have completed 13 presentations and attended 9 state/national conferences to share information about the funding opportunity and provide application development workshops. The Tennessee CMPQI program has scheduled quarterly Special Topics Webinars as an educational platform for emerging issues in nursing home facilities, such as healthcare-associated infections.

Networking efforts, both face-to-face and electronically, with nursing home staff, university partners, coalition members, nonprofit organizations, and various other stakeholders in Tennessee has led the department to receive 29 applications since January 2018 over the course of 3 RFA cycles. Eleven applications were approved by internal evaluators, and four were approved at the CMS level. Six are being assessed by CMS for funding.

The CMPQI staff has actively identified commonly missed opportunities among submitted applications and made appropriate improvements to the RFA process resulting in a higher percentage of applications forwarded to CMS for approval (25% from the March RFA versus 78% from the June RFA). The recalculated average dollar amount spent per year over the first six years of the CMPQI Program in Tennessee is $294,782.21. From fiscal year 2017 to fiscal year 2018, annual expenditures increased by approximately $519,264.54. Currently, a total of nine CMP projects are occurring in Tennessee with the total award amount of $1,887,918.93.

The Tennessee CMPQI team continues to expand upon the progress made in 2018. The draft 2019 CMPQI Strategic Plan has been developed and includes four short-term goals for 2019: making resources available related to each focus area on the Tennessee CMPQI website; applying for CMP funds to implement a statewide project; surveying long-term care staff to assess their training needs; and developing mentor groups to assist in proposal development with a special focus on low-performing facilities.

OFFICE OF THE STATE CHIEF MEDICAL EXAMINER

The Office of the State Chief Medical Examiner operates under the Department of Health and is granted statutory authority under Section 38-7-101, *Tennessee Code Annotated*, known as the "Post Mortem Examination Act." The Medical Examination Advisory Council assists the office with its mission to create consistent, high-quality medicolegal[20] death investigation and forensic autopsy services across the state. The office is also responsible for educating and training county medical examiners, keeping records of death investigations, and assuming investigative authority in cases of interest to the state, including mass fatalities and threats to

[20] "Medicolegal" refers to the nature of death investigations, which contain both a medical and legal component.

public health. The overall purpose of the office is to protect the public's health and safety, participate in the criminal justice system, and provide data for vital statistics.

Section 38-7-103, *Tennessee Code Annotated,* requires the Chief Medical Examiner to be a physician with an unlimited license to practice medicine and surgery in Tennessee, be a pathologist who is certified by the American Board of Pathology, and hold a certificate of competency in forensic pathology. The Commissioner of the Department of Health appoints the Chief Medical Examiner to a five-year term, and he or she may serve unlimited consecutive terms. In consultation with the advisory council and with the approval of the Commissioner of Health, the Chief Medical Examiner appoints the three deputy state medical examiners and any assistant state medical examiners needed for regional administrative, professional, and technical duties. The deputy medical examiners are based in one of the state's regional forensic centers[21] and are required to have the same qualifications as the Chief Medical Examiner.

County Medical Examiners and County Medical Examiner Investigators – Duties and Qualifications

Pursuant to Section 38-7-104, *Tennessee Code Annotated*, county medical examiners (CMEs) in Tennessee are appointed by the county mayor and confirmed by the county legislative body. CMEs must be a doctor of medicine or osteopathy and hold a license to practice medicine in Tennessee; they serve five-year terms and may be reappointed. They have authority to deputize any other physician in the area to act as a CME if a CME is temporarily unable to perform his or her duties.

Pursuant to Section 38-7-104, *Tennessee Code Annotated*, CME investigators investigate deaths under the supervision of a CME. Investigators may make death pronouncements and may recommend that an autopsy be ordered and, if delegated authority by the CME, may order an autopsy. CME investigators in Tennessee must be licensed emergency medical technicians, paramedics, registered nurses, or physician's assistants, or they must be registered by or a diplomate of the American Board of

***Governing* magazine profiles the "unprecedented challenges" faced by coroner and medical examiner offices across the country.**

The article describes a death investigation system that is "short staffed and underfunded . . . [and has] been hit hard by the opioid crisis." Death investigation laws, procedures, and practices vary from state to state but share a common problem—that it is becoming difficult to find qualified physicians. According to the article, the U.S. currently has 500 board-certified forensic pathologists, but the National Association of Medical Examiners recommends twice that number. Low pay is one of the primary disincentives keeping new doctors away from the field. For example, a primary care physician in a private practice can earn twice that of a public-sector forensic pathologist. Recent spikes in overdose deaths have strained the resources of coroner and medical examiner offices across the country—leading to inadequate spaces to hold bodies, delays in autopsies and toxicology tests, loss of accreditation, and increased decisions to forgo autopsies on some occasions.

Source: August 2018 issue.

[21] Five regional forensic centers are authorized as facilities for performing autopsies in Tennessee, per Section 38-7-105, *Tennessee Code Annotated*. The west and northeast forensic labs are a part of university systems (University of Tennessee Health Science Center and William J. Jenkins Forensic Center); the east and southeast regional labs are run by county governments (Knox County Regional Forensic Center and Hamilton County Regional Center); and the middle Tennessee regional lab is operated by a private company (Forensic Medical Management Services).

Medicolegal Death Investigators and approved by the CME as qualified to serve as a medical investigator.

If a county has an elected coroner, the coroner serves as the medical investigator for the county if they meet the qualifications for a medical investigator set out in Section 38-7-104, *Tennessee Code Annotated*. If the coroner cannot meet the qualifications, the county legislative body may authorize the CME to appoint a medical investigator (subject to confirmation by the county legislative body) or provide for this function through a contract for service approved by the CME and the county legislative body. If the county has an elected coroner who has served in that capacity for 10 years or more, the coroner serves as the medical investigator for the county, regardless of whether the coroner meets the qualifications set out in statute.

Reporting Deaths

There are specific circumstances of deaths that require reporting to CMEs. Reporting usually occurs through law enforcement, medical professionals, and members of the public. Section 38-7-108, *Tennessee Code Annotated,* specifies the circumstances surrounding a death that determine if the CME has jurisdiction to investigate the death. Those circumstances include

- death of any person from violence or trauma of any type;
- deaths that occur suddenly when a person is in apparent [good] health;
- sudden unexpected death of infants and children;
- deaths of prisoners or persons in state custody;
- deaths on the job or related to employment;
- deaths believed to represent a threat to public health;
- deaths where neglect or abuse of extended care residents is suspected or confirmed;
- deaths where the identity of the person is unknown or unclear;
- deaths in any suspicious/unusual/unnatural manner; and
- deaths where the body is to be cremated.

After a death has been reported, the CME may determine that an investigation is needed. If the cause of death cannot be determined following a death investigation—or if more information is needed, depending on the circumstances of the death—an autopsy may be deemed necessary. Four people can order autopsies: the Chief Medical Examiner, the county medical examiner, the district attorney, and a death investigator. Autopsies are performed at one of five regional forensic centers by a board-certified forensic pathologist accredited by the National Association of Medical Examiners.[22] Counties may choose to contract directly with a regional forensic center for autopsy services. In those contracted counties, the forensic pathologist at the regional center may sign the death certificate and then send it back to the county. For non-

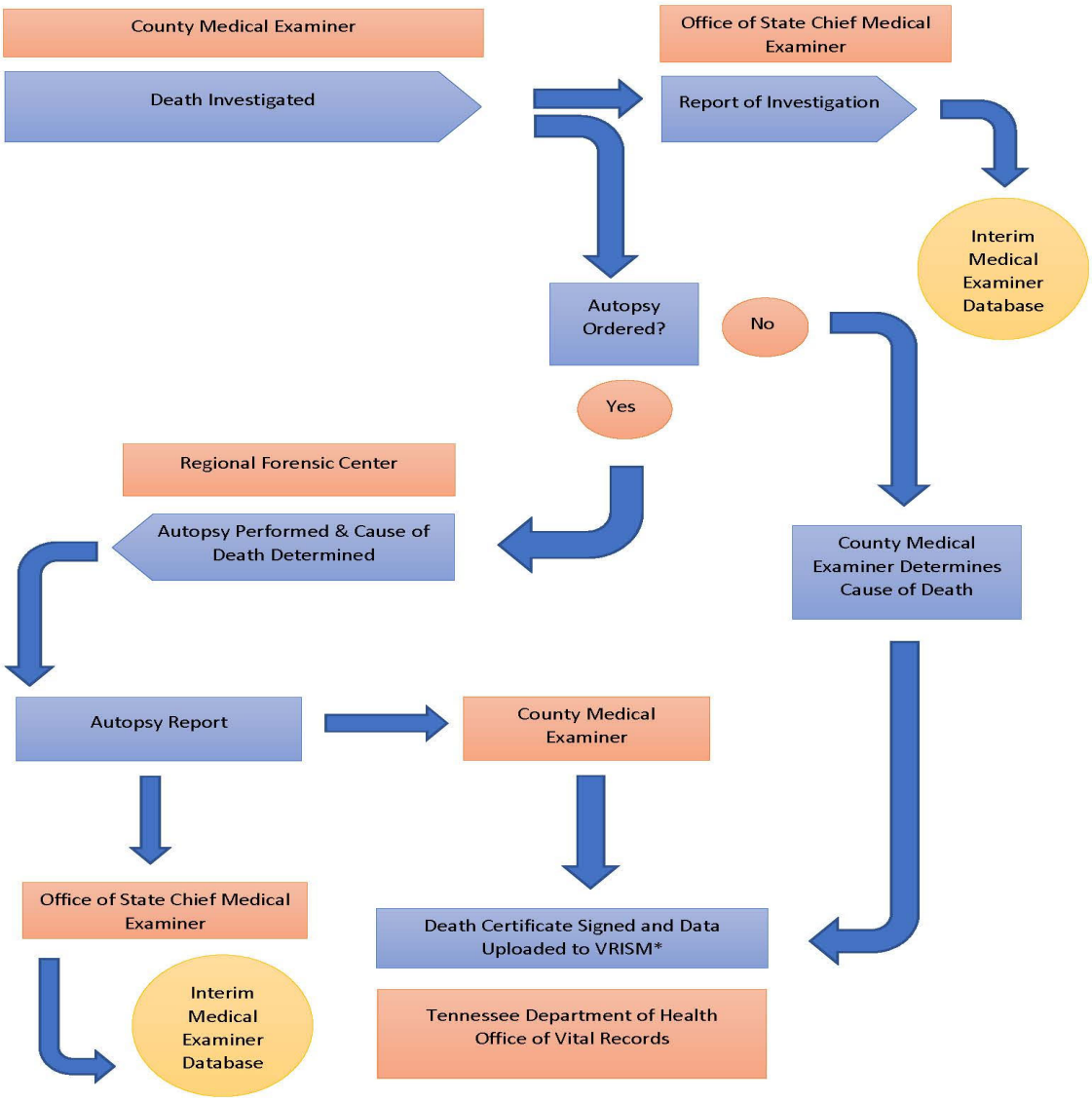
[22] The association's website lists Tennessee as fully accredited.

contracted counties, the autopsy information is sent back to the county, and the CME signs the death certificate.

Death Investigation System

The death investigation system involves coordination among different stakeholders and levels of government, including the Chief Medical Examiner, the five regional forensic centers, CMEs and CME investigators, district attorneys' offices, and law enforcement across the state. The decentralized structure of the state's death investigation system delegates the investigative work, decision making, and financial responsibility to the county and municipal level. Each CME conducts death investigations and provides an opinion as to the cause and manner of death. The Chief Medical Examiner provides general oversight and often advises CMEs (see **Exhibit 1**).

Exhibit 1
Death Investigation Process[23]
As of September 2018



Source: Auditor-developed flow chart approved by the Office of State Chief Medical Examiner.

[23] VRISM is the Vital Records Information System Management administered by the Tennessee Department of Health's Office of Vital Records. VRISM's purpose is to support the registration of Tennessee vital events for the Tennessee Department of Health and other users such as funeral directors, attending physicians, medical examiners, and birthing facilities.

National Association of Medical Examiners

The National Association of Medical Examiners (NAME) is a professional association of forensic pathologist medicolegal death investigators in the United States that publishes national autopsy standards and accredits death investigation systems. The Commissioner of the Department of Health expressed concerns about how Tennessee handles and regulates death investigations and commissioned a study by NAME, in January 2014, to provide an in-depth assessment of the state's death investigation system and the role of the Office of the State Chief Medical Examiner. The NAME report was issued in June 2014 and identified both strengths and weaknesses within Tennessee's death investigation system.

Weaknesses reported by NAME in its report for Tennessee include that

- statewide policies and procedures lack uniformity;
- the Chief Medical Examiner has no authority to implement statewide policies or to train, supervise, and discipline staff;
- many county medical examiners are inexperienced and untrained, and most self-train for the position—few have received a nationally recognized certification for death investigation;
- county budgets for death investigations vary from zero to three times the national average;
- fewer autopsies per capita are conducted in Tennessee than the national average; and
- there are insufficient succession plans to replace retiring county medical examiners.

Follow-up to the NAME Report

In the department's July 2015 response to the November 2014 sunset performance audit report, management reported that an administration bill was introduced during the 2015 legislative session to improve the Post-Mortem Examination Act (the Act) and address the issues noted in the NAME report. However, few stakeholders supported that legislation, and the department agreed not to move forward with the legislative proposal in its current form and to address all stakeholder concerns, starting with the regional forensic centers.

In April 2015, the Office of the State Chief Medical Examiner held a series of meetings with all five regional forensic centers and made progress with reaching out to other stakeholders, including state representatives, county mayors and executives, and district attorneys general. However, the department has not proposed further changes to the office's authority. As such, we focused our audit scope on one area discussed in the NAME report: the lack of a statewide death investigation data system.

Improvements Since the Prior Audit

Since the prior audit, the office has taken considerable action to improve the state's death investigation system—with efforts focused on obtaining county death investigation reports. In January 2017, the office developed the Interim Medical Examiner Database (I-MED), which allows counties to send reports electronically to the office. There are currently 228 registered users across the state—with all but 18 counties regularly reporting—and registered users can enter their reports directly and have access to their county information. The office also created a

new two-page Report of Investigation (ROI) form that is now accessible online at the department's website. To further incentivize cooperation from the counties, the office provides a $25 reimbursement to a county mayor's office for each ROI received and requests those funds be directed to support the county medical examiner. The goal is to collect as much information as possible and produce the first ever annual report for the Office of the State Chief Medical Examiner. The report will include information collected for calendar year 2017 and going forward—including data from death certificates, ROIs, and autopsies.

The department completed the request for proposal process and, in June 2018, executed a contract with Quincy Technology to develop the case management system for the state. The development phase is still underway, and Quincy Technology representatives have begun meeting with personnel from the forensic centers, with additional meetings planned for medical examiners and the remaining forensic centers. Once implemented, the case management system will replace I-MED and will be available to all counties and forensic centers across the state.

Audit Results

1. **Audit Objective**: Did the Office of State Chief Medical Examiner address the prior audit finding concerning the lack of training from the November 2014 sunset audit?

   Conclusion: The office has addressed the prior audit finding related to the lack of training offered across the state.

2. **Audit Objective**: Did the office address the absence of a statewide death investigation data system?

   Conclusion: While the office did implement an interim database for reporting death information, it lacks effective enforcement power to collect all death investigation data from counties, because the state's death investigation system is a decentralized model that vests authority and financial responsibility at the county level (see **Observation 3**).

Methodology to Achieve Objectives

We interviewed the state Chief Medical Examiner; obtained information from regional forensic centers; and reviewed documentation provided by the Office of State Chief Medical Examiner, the National Association of Medical Examiners, and the Centers for Disease Control and Prevention.

Observation 3 – Counties' noncompliance in reporting death investigations contributes to incomplete data reporting and collection, which impacts the quality of public health data available

Despite improved cooperation and data collection efforts, the Chief Medical Examiner stated that some counties are still not submitting Reports of Investigations (ROI) to the state, as required. Any time a county medical examiner (CME) is notified of a death, the CME must complete an ROI and submit it to the Office of the State Chief Medical Examiner. Section 38-7-109, *Tennessee Code Annotated,* states,

> When a death is reported as provided in 38-7-108, it is the duty of the county medical examiner in the county in which the death occurred to immediately make an investigation of the circumstances of the death. The county medical examiner shall record and store the findings, and transmit copies according to the death investigation guidelines developed by the Tennessee medical examiner advisory council.

The office's guidelines, approved by the Medical Examiner Advisory Council, require CMEs to submit a copy of the ROI to the office within 14 days of the report of death. The office lacks the enforcement power to effectively gather death investigation reports from CMEs across the state, which affects the ability to compile statewide data on death investigations. The Chief Medical Examiner stated to us that the office will contact the remaining 18 counties by letter and phone to make another request for their ROIs (see **Appendix 6)**.

The National Association of Medical Examiners' report recommended that Tennessee shift to a statewide system and stated that the most effective statewide medical examiner systems function with a "clear line of control and command similar to any hospital or military/paramilitary system." A centralized approach is only one variation of different death investigation systems, and the department may wish to explore alternatives to developing an effective statewide system with all stakeholders across the state.

Without the ability to obtain all death investigation reports across the state, the department cannot assemble and analyze quality public health data—including information on emerging diseases, drug overdoses, consumer hazards, and other dangers to the public. The office also lacks enforcement measures such as penalties and fines, further reducing the capability to elicit compliance from CME offices.

Matter for Legislative Consideration

The General Assembly may wish to consider whether an increase in the Office of State Chief Medical Examiner's authority and enforcement power, or other statutory changes, may help address the identified weaknesses.

Department of Health Comment

Management agrees and appreciates the observation. The Office of the State Chief Medical Examiner (OSCME) lacks effective enforcement power to collect all death investigation data from counties, because the state's death investigation system is a decentralized model that vests authority and financial responsibility at the county level. The OSCME recognizes the need for compliance in reporting death investigations from all 95 counties. The OSCME has made great strides in improving the standards and collection of Reports of Investigation (ROIs). The OSCME will continue efforts to improve reporting in the future.

Efforts by the OSCME in only two years have increased reporting of ROIs from 25% to 75% by implementing the Interim Medical Examiner Database. To date, the OSCME has made many attempts to receive ROIs on all medical examiner involved cases. First, a letter was sent from the OSCME to all county mayors/executives and medical examiners in the state, advising that ROIs must be sent to the state in order to produce an accurate annual report. Second, Commissioner Dreyzehner sent an additional letter to all county mayors/executives to further support the fact the counties needed to send their ROIs to the state. Third, the OSCME reduced the length of the ROI form from six pages to two in hopes of a higher completion rate, and advised all counties that the OSCME would be willing to accept any form already in use by a county. Fourth, the OSCME reallocated funding in order to incentivize ROI submission by offering $25 per report as a reimbursement for county medical examiners' efforts. Additionally, the OSCME provided Death Investigation 101 seminars, where medical examiners and investigators are actively enrolled as users in the I-MED database along with basic medicolegal death investigation training. The use of the ROI form and how to complete it are reviewed in both DI 101 and JAG trainings. The personnel of the OSCME have reached out by phone to all county medical examiners to directly encourage them to send in their ROIs, and articles regarding ROI submission are in the OSCME quarterly newsletters.

The audit report suggests legislative efforts to increase the OSCME's authority and enforcement power to address the identified weakness. The OSCME agrees that legislation to increase the authority of the OSCME to mandate timely reporting would increase reporting. As stated in the report, legislative attempts have been made in the past to increase authority of the OSCME, but have been removed from consideration or tabled at committee due to the negative reaction from stakeholders claiming the legislation would result in an unfunded mandate.

Due to the great strides the OSCME has made in increasing reporting in two years, as we are slowly gaining the trust of medical examiners, it would be better to continue to work with the medical examiners as a new case management system is implemented and consider proposing legislation at a future date.

JOINT ANNUAL REPORT AND *HOSPITAL SUMMARY REPORT*

Section 68-11-310, *Tennessee Code Annotated,* requires all hospitals licensed in Tennessee to submit to the Department of Health a *Joint Annual Report* (JAR) that includes hospital statistics and financial information. The statute also requires the department to compile the JAR data from the hospitals and issue a finalized statistical report (*Hospital Summary*

Report) that is available to the public. The department's Division of Health Planning is responsible for issuing the finalized report. The data reported fulfills several purposes, including the following:

- Applicants that are intending to open a new healthcare facility or practice can use the data to develop support for a required Certificate of Need (CON)[24] approval. Opponents can use it to counter an applicant's claim for need.
- The department uses the data to determine whether CON applicants' claims are reasonable and whether their applications meet the definition of "need" under the *State Health Plan.*
- Other occasional users include researchers and state agencies for various purposes, each of whom require accurate, reliable hospital provider data.
- The division's staff stated they could use JAR data to better identify gaps in care and causes of those gaps, and then develop strategies to address healthcare shortages.

To prepare the JAR, the hospitals self-report data by completing numerous data fields in a web application located on the department's website. Each of the 150 hospitals licensed in Tennessee must submit its JAR data within 150 days after the close of the hospital's fiscal year. The division is responsible for compiling all JAR data submitted during the calendar year and publishing an electronic summary by November 30 of the following year.

Review and Edit Procedures

To ensure accuracy in the data, the JAR reporting system uses automated cross-checks; for example, the system would flag inconsistencies in data if a hospital facility included data for a specific service but did not mark that service as offered at the facility. These types of automated tools imbedded in the system can prevent some data errors from occurring. Additionally, division staff attempt to review 10% of the JARs for obvious errors and may compare them to previous years' reports to detect errors.

Hospital Reporting Deficiencies

Section 68-11-310, *Tennessee Code Annotated,* requires the department to issue deficiencies against hospitals for not submitting its JAR timely, not submitting it at all, or submitting data that does not pass the department's edit process. Once a deficiency is issued, the hospital has 15 days to submit a corrective action plan to the department. When a hospital fails to submit a corrective action plan, or when the department determines the plan is unacceptable, the hospital is subject to disciplinary action, which may impact the hospital's license to provide services. The department's Division of Healthcare Facilities is responsible for issuing deficiencies after notification from the Division of Health Planning staff.

[24] A Certificate of Need (CON) is a permit to establish or modify a healthcare institution, facility, or service at a designated location. The *State Health Plan* charges the Department of Health's Division of Health Planning with setting the standards and criteria for granting a CON.

Our limited review of the department's *Hospital Summary Report* involved a high-level assessment on the reasonableness of that data based on the self-reported JAR data.

Audit Results

1. Audit Objective: Was the information for patients' county of residence in the department's *Hospital Summary Report* accurate?

Conclusion: While our review of the report was limited, we found anomalies in the information we reviewed (see **Finding 3**).

2. Audit Objective: Did the department issue deficiencies to hospitals for not reporting, not reporting timely, or reporting data that did not pass the department's edit process for submitted JAR reports from fiscal year 2012 to 2016?

Conclusion: The department did not issue deficiencies and did not comply with statute to issue deficiencies (see **Finding 3**).

Methodology to Achieve Objectives

We reviewed the department's annual *Hospital Summary Report* for fiscal years 2012 to 2016 for 11 counties' information on patients' county of residence. We interviewed management within the Division of Health Planning. We requested the list of deficiencies issued during the same time period of the *Hospital Summary Reports*.

Finding 3 – Management should improve its controls over the review process of *Joint Annual Reports* submitted by hospitals, including issuing deficiencies to hospitals, as required by statute, to ensure reports are as accurate as possible

We found anomalies in the Department of Health's *Hospital Summary Reports* that prevented us from analyzing the report information further. As part of our audit work on rural hospital closures (see **Emerging Issue** on page 44), we attempted to use the department's *Hospital Summary Report* for fiscal years 2012 to 2016. We wanted to establish how many patients in Tennessee counties would be impacted by hospital closures. Because of data anomalies, however, we did not use the *Hospital Summary Reports* to support any conclusions on rural hospital closures. We found anomalies in the reports from 5 of 11 counties we reviewed:

- For the 2016 *Hospital Summary Report*, 2,286 Stewart County patients, or 62.9% of all patients in the county (in western Middle Tennessee) were reported to have been hospitalized in Washington County (in upper East Tennessee). It appears unlikely that a majority of patients from Stewart County were hospital patients in Washington County.
- For the 2016 *Hospital Summary Report,* McNairy County's total patient count increased from 3,982 to 10,979 from 2015 to 2016. This appears unlikely since the

county reported only 2,914 patients in 2014, with a total population of 26,066 reported in 2015.

- For the 2015 *Hospital Summary Report,* Polk County's total patients were reported as 11,885. This appears unlikely considering only 1,664 patients were reported in 2014 and 2,102 in 2016. The number is also large considering Polk County's total population is 16,773; the number of patients reported in 2015 is more than half the county's population.
- For the 2015 *Hospital Summary Report,* Smith County reported 10,887 patients compared to only 2,319 in 2014. The 2015 number is unusually large considering the county's total population is 19,295, and the patient count in 2016 was 2,343.
- For the 2016 *Hospital Summary Report,* Madison County reported 2,468 patients. This total appears unusually low when compared to the 9,956 patients reported in 2015 and 10,044 in 2014.

Management agreed that the anomalies we identified were errors. According to Division of Health Planning management, three of the errors were caused by computer programming errors when the web application and summary reports were built. The remaining two errors were attributed to hospital staff keying data into incorrect fields. The errors in the summaries could result in stakeholders using inaccurate or incomplete data to make conclusions. Division staff stated that because hospitals self-report data and the division has no access to hospitals' records, they have very little ability to confirm the data before it is compiled and published. When the division does not identify data problems present within the reports, the department cannot ensure that report stakeholders are obtaining the most accurate and useable information on hospitals across the state.

Despite the department's statutory authority to ensure report accuracy, division staff stated that they only recommend corrective action for deficiencies if a hospital facility does not complete and submit its annual JAR report. Although we found at least one hospital that should have received a deficiency for failing to submit its JAR, we were unable to find that the department had issued a deficiency. By not issuing deficiencies to hospitals, the department has not complied with statute and cannot ensure it has received accurate hospital data to prepare the *Hospital Summary Reports*. Additionally, when the department does not notify hospitals of deficiencies, it cannot resubmit data or take corrective action to provide accurate information in the *Hospital Summary Report*.

Recommendation

Management should correct the programming errors and evaluate the edit checks for its online application for hospital report submissions. Also, the division should develop additional edits to strengthen its data validation process before including the data in the department's annual *Hospital Summary Report*. Management should evaluate its staff review of selected JAR reports and follow-up procedures to determine the improvements needed to accurately prepare the summary reports. Furthermore, management should adhere to statute by issuing deficiencies to hospitals that do not comply with the requirements of the *Joint Annual Report* statute.

Management's Comment

We concur. The audit reported two separate types of errors:

1. Incorrect Entry by Hospitals on the *Joint Annual Reports*: Three *Hospital Summary Report* errors were the result of hospitals entering patient origin data on their *Joint Annual Report* forms for the incorrect county. In each case, on the reporting form the incorrect county was listed one line above or below, as the case may be, from the correct county line. These mistakes were made by the hospitals when keying in their data.

   Corrective Action: The Department of Health staff has created a checks and balances tool that will be put in place by the end of calendar year 2018 to help verify hospitals' reporting accuracy in Hospital Schedule G Patient Origin. The tool will produce a report that will flag all counties with patient origin totals that show a 20% or greater difference from the previous JAR year, and the report will also list the hospitals that reported patients from the counties that experience this change. This report will allow the department's facility manager to quickly detect, investigate, and (if necessary) instruct the subject hospital(s) to correct these errors while also reducing JAR reporting mistakes and decreasing the querying process time. The 20% threshold was chosen because it is well below the percentage increases of the errors discovered by the audit.

2. Misidentified Counties on the *Joint Annual Reports*: Two *Hospital Summary Reports* misidentified counties when the Information Technology program produced total patient counts. This programming error was noticed several years ago by Health Planning staff and was corrected by the department's Information Technology Services Division at the request of Health Planning at that time; however, the error resurfaced for unknown reasons earlier in 2018. Department staff determined in March 2018 that the Access tables provided to them by the Department of Finance and Administration's Strategic Technology Solutions were not correct because they did not follow the department's usual alphabetic naming conventions (i.e., McMinn and McNairy Counties' data incorrectly populates in the programming in front of/before Macon County, thus pushing several counties' data to the wrong county in the reports; the impacted counties are listed below). This error caused the summary reports to display data in the wrong counties, although only in counties that begin with the letter "M." The same programming error also impacts Home Health Agency *Joint Annual Report* data.

Corrective Action Plan:

Department staff is currently working with the Department of Finance and Administration's Strategic Technology Solutions (STS) to correct data errors located on Summary Report 3 "SHORT-TERM HOSPITALS LICENSED IN TENNESSEE PATIENT ORIGIN DATA - ADMISSIONS OR DISCHARGES ACCORDING TO COUNTY OF RESIDENCE BY LOCATION OF FACILITY." Corrections have been prepared, and

department staff will coordinate with STS developers to move the updated software to production so the reports can be created.

Additionally, until department staff can revise this *Hospital Summary Report*, staff are placing an explanation regarding the misidentification of these counties' data on the *Joint Annual Report* home webpage.

Impacted Counties:
Macon County displays patient data reported for McMinn County
Madison County displays patient data reported for McNairy County
Marion County displays patient data reported for Macon County
Marshall County displays patient data reported for Madison County
Maury County displays patient data reported for Marion County
McMinn County displays patient data reported for Marshall County
McNairy County displays patient data reported for Maury County

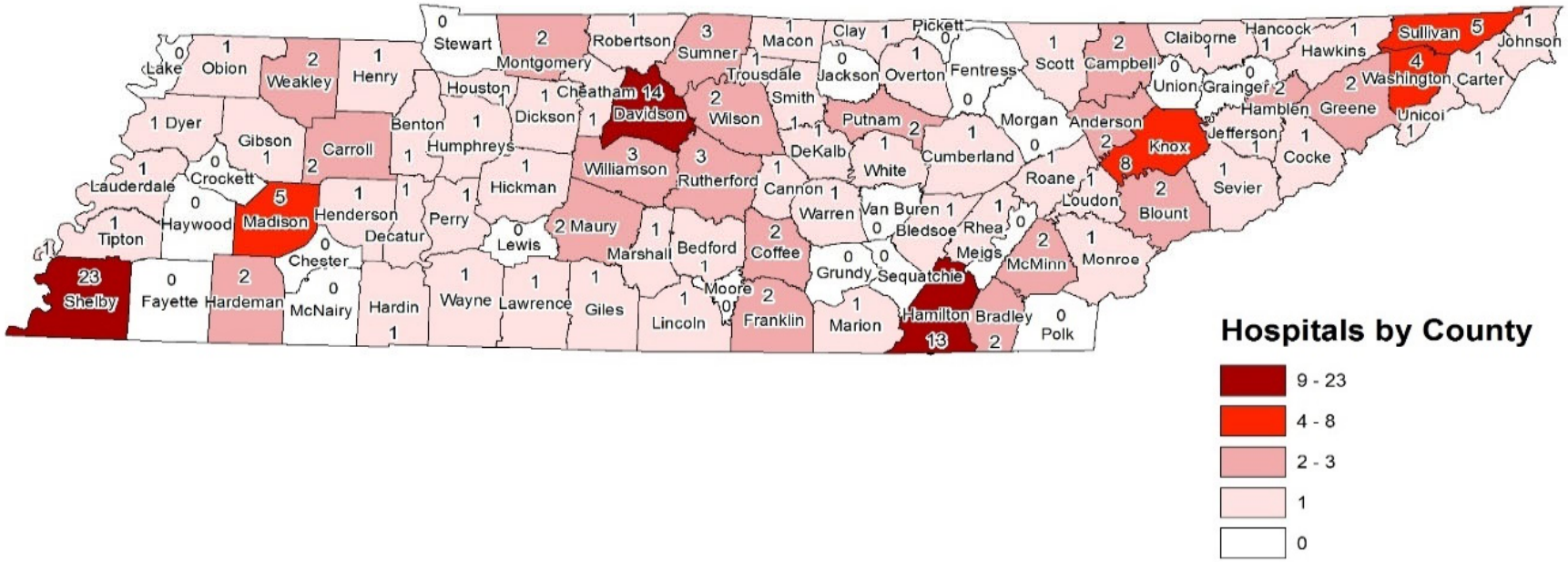
Finally, the audit recommends that "management should adhere to statute by issuing deficiencies to hospitals that do not comply with the requirements of the *Joint Annual Report* statute." Department staff agrees that it has not issued deficiencies as required by statute and has corrected this oversight. Notice of Deficiency forms are being prepared and will be in place prior to submission by hospitals of their next *Joint Annual Reports*. Additionally, the department would point out that while the statute requires hospitals' compliance with the reporting requirements, no specific consequence for noncompliance is set forth by the statute, beyond stating that the facility's license may be subject to disciplinary action. Thus, The General Assembly may want to consider more specific guidance in this regard.

EMERGING ISSUE: HOSPITAL CLOSURES AND COVERAGE OF CARE

As of August 2018, 20 counties in the state had no acute care hospital (see **Exhibit 2**). Multiple factors have contributed to rural hospital closures since 2012, including population decreases, changing payer mixes in rural areas, and technological advancements that are sometimes out of reach of rural hospitals. Areas where hospitals have closed have experienced multiple economic and health impacts. The Department of Health is limited in what it can do to deal with the situation.

Exhibit 2

Tennessee Hospitals by County, 2018



Map produced by Division of Population Health Assessment; Tennessee Department of Health

The Tennessee Hospital Association reported in February 2018 that since 2012, Tennessee has the second highest rate of hospital closures in the United States. Our review revealed that since May 2012, 12 hospitals have closed in primarily rural areas of Tennessee (with 1 reopening under new management). According to stakeholders, a number of factors contribute to hospital closures, especially in rural areas. The communities around those hospitals also suffer effects when hospitals close, including economic impacts such as increased costs to patients; increased costs to local emergency medical services; loss of tax base; loss of jobs; and health impacts such as increases in provider shortages and patient mortality.

Brownsville, Southwest Tennessee

Haywood Park Community Hospital in Brownsville opened in the 1970s and closed in July 2014. Eight months later, Methodist Fayette Hospital in Somerville, 26 miles to the south, also closed. Sixty miles southeast, McNairy Regional Hospital in Selmer shut down in May 2016. Humboldt General Hospital and Gibson General Hospital, less than an hour north, closed. Some outpatient services came back, but hospital beds did not. Many of Haywood County's 18,000 residents live below the poverty line, and the county ranks 90th out of Tennessee's 95 counties for health, with many people suffering from obesity and diabetes. Without an emergency room close by, the county has added a third ambulance to its fleet, but calls typically take 2.5 hours now compared to 30 minutes when the hospital was open. Ambulance crews have added more advanced care training, such as inserting chest tubes and intubating patients to keep them alive for longer transport times. But they also sometimes provide care without transport for patients who do not want to go to hospitals in Jackson or Memphis, a service for which neither Medicare nor Medicaid will pay. A failed tax increase proposal to help pay for emergency medical services means the county will soon lose one of its three ambulances, further eroding the availability of emergency care in the county.

Source: Amy Goldstein, "In the Tennessee Delta, a Poor Community Loses its Hospital," The Washington Post, (April 11, 2017), accessed online June 25, 2018.

Department Responsibility and Programs

The department has limited authority when it comes to a hospital's closure and viability. For example, the department has the authority to prevent a hospital from discontinuing emergency services and other specific types of care, but it cannot prohibit hospitals from discontinuing other services or closing altogether. One result is that some hospitals have discontinued everything except emergency services, resulting in some stand-alone emergency care centers. The department's State Office of Rural Health is responsible for administering some rural health programs that may impact rural hospitals and improve viability, including the following:

- The Medicare Rural Hospital Flexibility Grant Program is available to hospitals with 25 beds or less, and the hospitals receive 101%[25] reimbursement for Medicare and Medicaid services provided through a Critical Access Hospital designation. The program supports financial and operational sustainability and quality improvement for population-based care.

[25] According to Health Disparities Division management, enhanced billing (cost plus percentage) varies in accordance with rates approved by CMS for Medicaid- and Medicare-eligible patients.

- The Small Rural Hospital Improvement Program is available to hospitals with 49 beds or less and funds small quality improvement projects for eligible hospitals, including planning for hospital transformation or business model adjustments.

The department administers three additional federal and state programs that may aid hospitals in their ability to provide necessary services. These include incentive programs for recruiting and retaining physicians, including

- the National Health Service Corps, which pays up to $50,000 in loan repayment for professionals to work in an underserved community for at least two years;
- the Tennessee State Loan Repayment Program, consisting of state-allocated funds with matching federal funds of up to $50,000 annually for primary care physicians, dentists, nurse practitioners, and physician assistants to make two-year commitments to practice in an outpatient setting in an underserved community (rural or urban); and
- the State Conrad J-1 Visa Waiver Program, which allows placement of a foreign physician in a shortage area by waiving the requirement to return to their home country in exchange for a three-year service obligation in an underserved area.

Tennessee Rural Hospital Transformation Act

In 2018, the General Assembly passed Public Chapter 1055, the Tennessee Rural Hospital Transformation Act, to be administered by the Department of Economic and Community Development (ECD). The act creates an advisory committee[26] that, in consultation with ECD, is charged with identifying consultants to advise struggling rural hospitals and create transformation plans focused on helping them improve their viability. The act limits program expenditures to $1 million per fiscal year.

Additional Resources and Related Strategies

An additional resource that may help ensure hospital viability, but is not administered by the Department of Health, is Q-Source, a publicly supported nonprofit. Q-Source is a quality improvement organization that contracts with the federal Centers for Medicare and Medicaid Services (CMS) to audit providers, but it also can provide consulting services for hospitals on how to be more cost-effective and improve quality of care. Q-Source also facilitates coalitions across the state that work on care coordination—one of the things CMS quality improvement staff look at when evaluating providers. Q-Source is neutral to providers—it simply looks at quality of care and how it can improve providers' quality of care.

The State Office of Rural Health is the lead resource for hospitals within the department, and has defined a three-year strategic plan that includes the goal of "Access to quality, affordable healthcare services." Strategies outlined in the plan to help achieve that goal include

[26] The advisory committee is to be composed of one or more representatives of each of the following: the Department of Health; the Department of Labor and Workforce Development; the Bureau of TennCare; the Board of Regents; and other public and private stakeholders deemed appropriate by the Department of Economic and Community Development.

- providing funding and technical assistance to rural and safety net[27] providers;
- increasing the capacity of the healthcare workforce to support vulnerable populations in underserved areas;
- reducing chronic diseases to support optimal health for all; and
- delivering customer-focused services.

These strategies, while not specifically geared toward ensuring rural hospital viability, are relevant to the rural hospital closure issue.

Contributing Factors and Impacts of Hospital Closures

During our audit, we learned of the following contributing factors and post-closure impacts resulting from hospital closures.

Factors of Hospital Closures

- population decreases;
- lack of doctors and other healthcare professionals to staff hospitals (for example, a hospital cannot provide OB/GYN services with fewer than two OB/GYNs, so they must eliminate that service if only one provider remains working at a hospital);
- a larger poor and elderly, low-payer population in rural areas results in fewer paying customers with commercial plans, which means a hospital has to rely on Medicaid and Medicare reimbursements;
- payers that can afford to pay and have commercial plans often travel to hospitals that have newer equipment and more doctors and services; the more the population mix of payers decreases, the harder it is for a hospital to sustain itself operationally;
- competition from urgent care centers, ambulatory surgical treatment centers, and other types of care centers that have opened;

[27] The safety net program is a state program to provide health services to uninsured adults between the ages of 19 and 64. See the HealthCare Safety Net for the Uninsured section on page 11 of the report for more information.

- the trend of moving specialists to more populated areas if a rural hospital is part of a hospital system, resulting in a lower inpatient bed count and less money at the rural hospital;
- some patients choosing to travel further to hospitals because of perceptions about quality of care;
- hospitals must focus on services that generate the most revenue, which might not meet the needs of a community;
- the transition to value-based payments (no payment for services rendered for patients readmitted for the same or related conditions within 30 days of hospital discharge);
- a patient-centered medical home care model, in which the outpatient primary care provider coordinates care under a "per capita" payment model to reduce the use of inpatient and emergency services;
- difficulty affording the necessary hardware and software to use health information technology that digitizes information for easier access, sharing, and analytics;
- lack of sufficient broadband capacity to use telemedicine for specialty consults in conjunction with regular primary care services; and
- consolidation of larger health systems that sometimes results in corporate owners closing smaller, less profitable hospitals in their systems.

Copper Basin

To access healthcare, residents of Ducktown, Tennessee, must drive across state lines to hospitals 30 minutes away, or to Cleveland, Tennessee, 40 miles away, for hospital care. This is because the Copper Basin Medical Center closed in October 2017. There are also no walk-in clinics or urgent care centers. Faced with mounting debt; an aging facility; outdated equipment; and older patients who were primarily on Medicare, Medicaid, or uninsured, Copper Basin Medical Center permanently closed in October 2017 after multiple failed attempts to find investors or partners that might rescue it. Only 27% of its patients had private insurance, and those who did often drove further to more modern facilities with electronic medical records and modern equipment. Exacerbating the efforts to find a partner was the fact that the facility contained asbestos, making renovations or improvements even more costly for potential investors. The hospital once employed 150 people, so the closure affected not only the people, but also businesses as these former employees find work elsewhere. Sales tax collections were down 7% in the first quarter of 2018 compared to 2017, and Ducktown's only grocery store closed shortly after the hospital. The residents of the area currently have no hospital or emergency department for the first time since the 1950s.

Source: Shelby Livingston, "Rural Tennessee Town Feels the Downstream Effects of Its Only Community Provider Shutting Its Doors," *Modern Healthcare InDepth*, (June 9, 2018), accessed online June 12, 2018.

Impacts of Hospital Closures

- economic impacts such as
    - cost to patients (transportation, child care, out-of-town travel, and lodging);

    - cost to employers (lost productivity when employees have to travel further for services);
    - job losses—hospitals are often a community's second largest employer, after government services;
    - loss of tax base—hospitals may bring in both property and sales taxes; and
    - burden on Emergency Medical Services, which incurs additional costs where transport out of the community is necessary; and
- health impact—the impact on the health of residents in an area where a hospital has closed is difficult to quantify; however, some impacts that may result from hospital closures include
    - an increase in maternal or infant mortality where labor, delivery, and pre- and post-natal services have closed;
    - an increase in deaths related to traumatic injuries and overdoses, if emergency services are no longer available in the local community;
    - an increase in deaths related to chronic diseases such as cardiovascular disease (stroke, heart attack) and cancer, if screening and intervention services are no longer available; and
    - an increase in provider shortages, when physicians can no longer refer patients or admit them to local hospitals.

Conclusion

The issue of rural health hospital closures is complex, involves multiple factors, and poses serious challenges for the state in terms of providing accessible healthcare for its rural population. A rural hospital's viability is a delicate balance between being able to provide needed community or regional services and being able to generate enough income resources to keep itself moving forward, technologically relevant, and valued by customers. In some cases, counties are heavily invested in these hospitals, which places a burden on county budgets. A lack of hospitals can create burdens on the lower-income population in terms of access to care and affordability unless other emergency services, such as local urgent care centers and ambulatory care services, become and remain available to serve. Even so, as rural hospitals close, counties must deal with the economic and health impacts on citizens. Further study is needed to determine whether the impacts are largely negative or positive and to identify potential future solutions to ensure citizens have adequate access to healthcare.

The state is taking steps, through the 2018 Rural Hospital Transformation Act, to link multiple governmental departments in an effort to address the issue, which is now becoming a national topic. Linking the Department of Health and the Department of Economic and Community Development is a step in the right direction because the complexities cross professional, public health, and economic lines. The Department of Health should continue working on the State Office of Rural Health's strategic plan, which focuses on providing funding and technical support and increasing the capacity of the healthcare workforce to service underserved areas. The department should help capture and provide data via information on

Critical Access Hospital designations, population health assessments,[28] *Joint Annual Reports*, and other potential sources. These steps alone may not be enough to prevent future closures and the growing concern, but it is a start toward that goal.

HEALTH ADVISORY ENTITIES

Five entities provide advice and recommendations to the Commissioner of the Department of Health on various health topics: the Genetic Advisory Committee, the Perinatal Advisory Committee, the Traumatic Brain Injury Advisory Council, the Advisory Committee for Children's Special Services, and the Medical Examiner Advisory Council. For additional information on the advisory entities, see **Appendix 3**.

Audit Results

1. Audit Objective: Did the Medical Examiner Advisory Council address the prior audit finding from the 2014 sunset audit concerning meeting statutory requirements?

Conclusion: The advisory council addressed the prior audit finding that cited the council's failure to meet statutory requirements.

2. Audit Objective: Did the advisory entities meet statutory requirements and best practices for conducting business through public meetings by maintaining meeting minutes and conflict-of-interest forms; giving prior notice of meetings and having a quorum at those meetings; and recording member attendance?

Conclusion: With some exceptions, the advisory entities followed state statute and best practices in meeting their responsibilities; however, we did find issues concerning absences, quorums, and conflict-of-interest policies (see **Observations 4, 5, 6, and 7**).

Methodology to Achieve Objectives

To achieve our objectives related to these entities, we interviewed department staff and board member chairs or acting chairs. We also reviewed applicable state statute, rules, meeting minutes, public notices, and conflict-of-interest forms. We reviewed board attendance from January 2015 through November 2017.

[28] The Division of Population Health uses datasets to generate valuable statistical reports to drive public health programming and population health improvement initiatives. Population-level datasets include but are not limited to hospital discharges, ambulatory surgery treatment centers, and outpatient diagnostic and treatment centers.

Advisory Committee for Children's Special Services

The Advisory Committee for Children's Special Services was created in 1929, under Section 68-12-106, *Tennessee Code Annotated*. The committee's duty is to advise the department on issues related to children's special services, as requested by the Commissioner. The committee provides advice on care and treatment for Tennessee's physically disabled children whose parents or guardians may fail or be unable to provide necessary treatment due to financial or other reasons. Services include medical, surgical, dental, hospital, outpatient clinic service, rehabilitation, or domiciliary care.

The committee is composed of seven members appointed by the Commissioner of the Department of Health and approved by the Governor. Members serve four-year terms. Statute makes no requirements for meeting frequency.

Observation 4 – The Advisory Committee for Children's Special Services has not had a quorum for recent meetings, limiting its effectiveness; additionally, members are not completing conflict-of-interest forms

The Advisory Committee for Children's Special Services, which has no statutory meeting requirements, met once in 2015 and 2017; however, the committee did not meet in 2016 due to committee member vacancies. It also did not have a quorum for the meeting held in 2017. According to Department of Health staff, because members are located throughout the state, meeting in-person is difficult for committee members who are medical providers and must be absent from their practices. Members have considered video conferencing; however, the department has interpreted from Section 8-44-108, *Tennessee Code Annotated,* that members must meet in-person to vote. Because of the difficulty in scheduling and traveling for meetings, the committee only meets when there are concerns or changes to policy that require a vote.

Additionally, the committee members are not disclosing conflicts of interest, because the committee has not developed a form. During our audit fieldwork, department staff indicated they were developing a form for members to complete.

As of September 2018, the committee has one vacancy, but the department expects it to be filled by the next meeting to be held in October or November 2018.

The department and committee members should consider reaching out to the Office of Open Records Counsel for assistance in understanding the statute. Additionally, members should be completing conflict-of-interest forms.

Department of Health Comment

Management agrees with the importance of maintaining an engaged and representative committee and acknowledges the difficulty in recruiting volunteer members from various pediatric specialties with additional attention to geographic representation. To address the absence of a quorum for recent meetings of the Children's Special Services Advisory

Committee, staff has dedicated significant time to developing additional relationships with pediatric specialists to expand its reach of potential applicants. A meeting of the fully staffed committee is scheduled to take place November 9, 2018. In addition, meetings are planned at least four to six months in advance to allow providers to block off time in their schedules to attend the meetings, and staff are sending out bi-weekly reminders of the scheduled meeting to all members. A conference line has in the past and will continue to be made available for members that are unable to travel.

Committee staff are meeting with the department's legal team to develop a conflict-of-interest statement. The conflict-of-interest statement will be provided to members at the November 9, 2018, meeting for review and signature.

Genetic Advisory Committee

The Genetic Advisory Committee was created in 1985, under Section 68-05-503, *Tennessee Code Annotated*. The committee advises the Commissioner of the Department of Health in developing, expanding, and maintaining regional Genetics and Sickle Cell Centers and developing standards for statewide genetic services.

The Commissioner appoints members to the committee, which is composed of one representative from each of the four regional Genetics and Sickle Cell Centers, at least two members-at-large, and the Chief Medical Officer for the state. The Chief Medical Officer or an appropriate designee chairs the committee. Members serve four-year terms. The committee must, by law, meet at least once per year.

Observation 5 – Some members of the Genetic Advisory Committee missed at least half of the committee's meetings

Some members of the Genetic Advisory Committee are not attending meetings regularly. While these absences did not prevent the commission from having a meeting quorum, when members do not attend meetings, the committee cannot provide the department with a well-rounded perspective from a diverse set of members. **Table 7** and **Table 8** show the total number of members absent and the percentage of members absent.

Table 7
Genetic Advisory Committee
Committee Members Who Failed
to Attend at Least Half of the Scheduled Meetings[29]

Year	Total Members	Members Absent
2015	16	3
2016	15	3
2017	17	3

[29] During our review period, the committee met quarterly between May 2015 and November 2017.

Table 8
Genetic Advisory Committee
Details of Committee Members' Attendance

Year	Member	Member Specialty	Percent Absent
2015	Member 3	Sickle Cell Center	67%
	Member 7	Member-at-Large – Physician	67%
	Member 15	Genetic Center	67%
2016	Member 3	Sickle Cell Center	100%
	Member 7	Member-at-Large – Physician	100%
	Member 14	Member-at-Large – Pediatric Cardiologist	75%
2017	Member 3	Sickle Cell Center	100%
	Member 7	Member-at-Large – Physician	100%
	Member 17	Member-at-Large – Pediatric Cardiologist	100%

Department of Health Comment

Management agrees with the importance of maintaining an engaged and representative committee, and acknowledges the difficulty in recruiting and retaining volunteer members from this community of highly respected experts. To specifically address the member absences at the scheduled meetings of the Genetic Advisory Committee, staff have taken the following actions during the three years of the audit that are specific to particular members:

- Staff have continued to encourage Member 3 (sickle cell center) to designate his staff person who regularly attends as his representative or designee at the meetings. Their clinic has few staff, and he regularly sees patients. Staff will discuss options for attendance with the Director.
- For the member-at-large – physician (Member 7), this person has been replaced with a new member. As of October 2018, Member 7 is no longer a member.
- The member-at-large – pediatric cardiologist moved out of state in 2017. In 2018, this position was filled with another pediatric cardiologist.

For each meeting of the committee, the program makes a toll-free conference line or a Webex connection to the meeting available. Members are reminded and encouraged to designate a representative should they be unable to attend. In scheduling the meetings for the upcoming calendar year, a survey is sent to all members asking for conflicting dates (conferences, clinic days, teaching commitments, etc.); selection of the meeting dates considers the responses in determining the schedule. However, it should be noted that many of the members provide direct patient services on a regular basis and are responsible for teaching residents, interns, and other students. The committee changed from meeting twice a year to three times a year to provide more opportunities for attendance and contributions.

Tennessee Medical Examiner Advisory Council

The Medical Examiner Advisory Council was created in 2008, under Section 38-07-201, *Tennessee Code Annotated*. State statute was amended in 2017 to restructure the council. Under the new law, the council increased its membership from 9 to 15 members and changed the composition requirements—losing representation by the citizen member and the Commissioner of the Department of Health and gaining representation by the state Chief Medical Examiner; a forensic pathologist from each of the five regions; a hospital administrator; and one county mayor. The council retained membership of the director of the Tennessee Bureau of Investigation, who is a permanent member; one district attorney general; one district public defender; three county medical examiners, one from each grand division; and a licensed funeral director. Regularly appointed members serve a three-year term with a maximum of two consecutive terms. If an appointed council member is absent for more than half of the meetings scheduled in any calendar year without good cause, a vacancy is created.

The newly organized council first met on December 1, 2017; January 19, 2018; and April 13, 2018. The council is required to meet at least quarterly and has the power and duty to make recommendations to the Chief Medical Examiner; develop and review guidelines for death investigations and forensic autopsies; and submit an annual report on medical examiner standards.

Perinatal Advisory Committee

The Perinatal Advisory Committee was created in 1974 under Section 68-01-803, *Tennessee Code Annotated.* Its mission is to improve birth outcomes and decrease infant mortality. The committee is composed of 21 members who serve four-year terms, including Regional Perinatal Center newborn and obstetrical directors; experts in perinatal medicine; hospital administrators; and nurses and physicians, and it provides advice and direction to the Department of Health. It meets annually and at the request of the chair. By law, the committee must meet at least once per year.

Observation 6 – Several members of the Perinatal Advisory Committee missed at least half of the committee's meetings

For calendar years 2015 through 2017, the committee held eight meetings and met at least twice a year. **Table 9** and **Table 10** show the total number of members absent and the percentage of members absent.

Table 9
Perinatal Advisory Committee
Committee Members Who Failed
to Attend at Least Half of the Scheduled Meetings

Year	Total Members	Members Absent
2015	21	3
2016	21	10
2017	21	5

Table 10
Perinatal Advisory Committee
Details of Committee Members' Attendance

Year	Member	Member Specialty	Percent Absent
2015	Member 5	Regional Obstetrical Unit	100%
	Member 7	Medical School	100%
	Member 13	Public Health Agency	67%
2016	Member 3	Regional Newborn Unit	50%
	Member 7	Medical School	100%
	Member 9	Regional Newborn Unit	100%
	Member 14	Public Health Agency	100%
	Member 15	Regional Obstetrical Unit	50%
	Member 17	Family Physician	100%
	Member 18	Specialist in Newborn	100%
	Member 19	Medical School	50%
	Member 20	Regional Obstetrical Unit	50%
	Member 21	Hospital Administrator	50%
2017	Member 4	Regional Obstetrical Unit	100%
	Member 13	Medical School	67%
	Member 15	Regional Newborn Unit	67%
	Member 16	Neonatology Specialist	67%
	Member 23	Family Physician	100%

When members do not attend meetings, the Commissioner does not get a well-rounded perspective from a diverse set of members. To further illustrate, one of the two members who missed seven of eight meetings is the only medical school representative on the committee.

Department of Health Comment

Management agrees with the importance of maintaining an engaged and representative committee, and acknowledges the difficulty in recruiting and retaining volunteer members from this community of highly respected experts. For each meeting of the committee, the program makes available a toll-free conference line. When members indicate they cannot attend a

meeting, the member is reminded that he or she can send someone to represent them. For each year's meetings, staff request approval to pay travel costs for members in accordance with the state's travel regulations. Travel costs are paid to those members submitting a state travel claim. In scheduling the meetings for the upcoming calendar year, a survey is sent to all members asking for conflicting dates (conferences, clinic days, teaching commitments, etc.); selection of the meeting dates considers the responses in determining the schedule. However, it should be noted that many of the members provide direct patient services on a regular basis and are responsible for teaching residents, interns, and other students. The committee changed from meeting twice a year to three times a year to provide more opportunities for attendance and contributions.

Traumatic Brain Injury Advisory Council

The Traumatic Brain Injury Advisory Council was created in 1993 under Section 68-55-102, *Tennessee Code Annotated*. The council provides advice and guidance to traumatic brain injury program staff on policy issues and concerns regarding health and human services for survivors of traumatic brain injuries. The nine-member council is appointed by the Governor and includes representatives of the Departments of Education; Mental Health and Substance Abuse Services; Intellectual and Developmental Disabilities; and Human Services. An additional member is a healthcare professional that provides direct care to persons with traumatic brain injuries. Five members represent the categories of traumatic brain injury survivor, family member, or primary care giver. Members are appointed to serve two-year terms. The council meets quarterly.

Observation 7 - The Traumatic Brain Injury Advisory Council conducted business during a meeting where it did not have a quorum; additionally, some members missed at least half of the committee's meetings

The Traumatic Brain Injury Advisory Council met 12 times during the review period and lacked a quorum on 2 occasions. On one of these occasions, in 2017, the council conducted business without a quorum. Section 4-5-107*, Tennessee Code Annotated,* requires a majority of members present to make decisions on rules or contested cases. Also, in 2017, 4 of 9 members missed 50% or more of the council's meetings.

The council must adhere to meeting guidelines and not conduct business without a quorum. **Table 11** and **Table 12** show the total number of members absent and the percentage of members absent.

Table 11
Traumatic Brain Injury Advisory Council
Committee Members Who Failed
to Attend at Least Half of the Scheduled Meetings

Year	Total Members	Members Absent
2015	9	2
2016	9	2
2017	9	4

Table 12
Traumatic Brain Injury Advisory Council
Details of Committee Members' Attendance

Year	Member	Member Specialty	Percent Absent
2015	Member 5	Survivor	50%
	Member 7	Education	75%
2016	Member 5	Survivor	50%
	Member 8	Education	100%
2017	Member 3	Survivor	75%
	Member 5	Survivor	50%
	Member 8	Education	75%
	Member 9	Survivor	50%

Department of Health Comment

Management agrees with the importance of maintaining an engaged and representative committee, and acknowledges the difficulty in recruiting and retaining volunteer members from this community of highly respected experts. The department appreciates the opportunity to be able to review the minutes from the Traumatic Brain Injury (TBI) Advisory Council meetings to address the above concern.

When members have missed meetings, the reasons for the absences have been recorded and are available for review. Meetings are scheduled in advance with the input of members. However, conflicts for members have at times been unavoidable and have included mandated employer training and emergency family obligations, which are likely as many members are TBI survivors or caregivers.

ADDITIONAL INFORMATION ON THE DEPARTMENT'S PROGRAMS AND ACTIVITIES

VITAL RECORDS INFORMATION SYSTEM MANAGEMENT SYSTEM

The Office of Vital Records is responsible for reviewing, registering, amending, issuing, and maintaining the original certificates of births, deaths, marriages, and divorces that occur in Tennessee in accordance with Title 68, Chapter 3, *Tennessee Code Annotated*. Vital records information originates in places such as hospitals, birthing centers, funeral homes, medical examiners, and county clerk offices across the state. According to a recent Department of Health internal audit report, for 2017, the office registered 86,825 births, 73,867 deaths, 55,227 marriages, and 23,515 divorces. The office issued a total of 553,431 birth, death, marriage, and divorce certificates.

The new Vital Records Information System Management (VRISM) system will provide a user-friendly computer interface that allows for electronic communication between the Office of Vital Records and partners who register vital events in Tennessee. The department completed the first implementation phase in April 2017 and is scheduled to complete the last phase by December 2020. VRISM is web-based and will replace the paper-based process predominantly used in the past. It will also replace legacy systems such as AIRS,[30] TVRS,[31] FileNet,[32] and others that are used to gather, manipulate, and store data. VRISM will register and manage points of sale, death certificates, birth certificates, marriage certificates, divorce decrees, fetal death reports, and reports of induced termination of pregnancy. It will also provide vital statistics to federal entities such as the Centers for Disease Control and Prevention (CDC), the Social Security Administration (SSA), and the National Center for Health Statistics (NCHS).

New Developments

1. Project Extension − The department began a $10 million project in 2011 to upgrade the state's system for registering and maintaining its vital records by 2019. According to project management, approximately $5 million of the budget has been spent and the project is under budget. However, due to necessary external projects,[33] Information Technology (IT) will be requesting a year extension.

2. Project Implementation − Currently, there are two VRISM modules implemented statewide, point-of-sale certificate issuance and death certificate registration. Between

[30] The Automated Index Retrieval (AIRS) is a vital records system used to print short certificates for birth. This is no longer supported by the vendor.

[31] TVRS is an imaging system and a Strategic Technology Solutions enterprise system used to store and retrieve imaged documents.

[32] FileNet is a state imaging system used to store and retrieve imaged documents.

[33] External projects are unplanned but necessary additional projects that come to light during development or after implementation and often fine-tune a program's functionality. Often these are the result of customer feedback, and that was the case when the department developed a web-based user registration form for the death certificate module.

December 2016 and April 2017, the department rolled out the first module, the point-of-sale certificate issuance module. This enabled all 95 counties to print and issue vital record certificates at the point of sale. This allows the department to collect and store statewide data that can be used for regional, state, and national statistics. Creating permanent storage for point-of-sale information was in response to a recently submitted Records Disposition Authorization (RDA) request sent to the Secretary of State by the State Registrar (RDA 10143). Since implementation, the department has collected $584,770.31 from the CDC, SSA, and NCHS.

3. Death Certificate Registration − The department rolled out the next portion of VRISM in September 2017, death certificate registration, which will be fully implemented by July 2018. IT management reported to us that, starting in November 2017, 31% of death records were registered electronically; in May 2018, the amount grew to 61%. These death records come from both funeral home and medical certifiers. As of July 16, 2018, only electronic certificates are accepted for registration. Between January and May 2018, 33,650 deaths have been registered, with a monthly average of 6,730.[34]

Medical certifiers' inactivity appears to be a leading impediment to achieving full electronic registration. Management reports that nearly all funeral homes are using VRISM, but only 74%[35] of medical certifiers most involved with certificate registration are system users.

4. External Projects – These are projects that are not originally planned for but arise as a necessity for unforeseen circumstances and may add time to the completion of a module rollout phase. After implementing the death certificate module, customers began registering numerous complaints about the length of time it took to be approved as a user and thus gain access to the system. This was because the process required the funeral home director or medical certifier to complete a user access registration form and mail it to the department for staff to key and approve before granting the user access to the system. Staff processing these forms often were delayed due to information missing or incorrectly filled in. In response, the department's Information Technology division, with vendor cooperation, developed an electronic user access registry system. This system, deployed at the beginning of June 2018, should impact user approval times and reduce form errors.

Other external projects that are affecting the overall project implementation time include installing updated computer servers necessary to keep the system running and operating environment upgrades required by the state's Strategic Technology Solutions center.

[34] We calculated this number, as of May 2018, based on values provided from department IT management.

[35] We calculated this percentage, as of May 2018, based on values provided by department IT management for Priority 1 and Priority 2 groups. (Priority 1 (60%) and Priority 2 (20%) groups represent medical certifiers who complete 80% of death certifications registered within the state).

Table 13
Current Project Implementation Plan[36]

Module	Anticipated Rollout
Online System User Access Registration	June 2018
Death Certificate Registration	Complete rollout by July 2018
External Projects: System Servers System Environment Upgrade Disaster Recovery	 June 2018 (TVRS Server Move) June 2018 August 2018
Birth Certificate Registration	August 2018
Fetal Death Registration	February 2019
Marriage Registration	March 2020
Divorce Registration	August 2020
Termination of Project	December 2020

Source: VRISM Contract Extension Updated Schedule, May 1, 2018.

TENNESSEE HEALTH DEPARTMENTS

The Department of Health provides public health services in 89 county health departments and 7 regional health offices located throughout the state. The department also works with 6 metropolitan health departments. The department reports 1.7 million visits by roughly 750,000 individuals to these local health departments.

The local health departments play a key role in helping the department communicate preventive health strategies to communities. Employees in the regional health offices and county health departments have been asked to participate in a Primary Prevention Initiative (PPI), which supports local community coalitions to promote healthier lifestyles and participate in activities such as reading and mentoring programs, safety classes, health screening events, and running and walking programs. Some of the PPI topic areas include tobacco, obesity, immunizations, infant mortality, and substance abuse.

Health Department Internal Reviews

According to the Compliance and Ethics Internal Audit Assistant Commissioner, roughly 80% of the division's annual audits are devoted to county health departments. For 2017, the division audited 19 county health departments; its audit plan for 2018 includes 17 audits. In 2017, 11 of the 19 audits had no issues noted. For the majority of audits with issues noted, management of the entities agreed to make necessary changes. Some of the issues identified

[36] These dates are as of the May 2018 schedule, because these timelines are not fixed and are continuously adjusted due to production needs and challenges.

were untimely or missing inspections, required information missing from inspection sheets, inadequate internal controls over the Patient Tracking Billing Management Information System (PTBMIS), and non-patient ledger accounts in PTBMIS.

In addition to the routine Compliance and Ethics audits performed, the Division of Communicable and Environmental Disease Emergency Preparation also reviews the county health departments. The reviews, conducted every two years, focus on the delivery of immunization program services. Reviewers utilize a monitoring tool created by the Office of Internal Audit and conduct site visit reviews every 24 months.

Electronic Information System

The department is also implementing an electronic patient information system for all health departments; currently, approximately 40 of the 89 counties have these systems. Department epidemiologists have real-time data access to health departments through the PTBMIS and the National Electronic Disease Surveillance Base System, which allows the department to monitor for disease outbreaks in real time and is more efficient than relying on health departments to report information.

TENNESSEE LABORATORY SERVICES NEWBORN TESTING

The Department of Health's Laboratory Services Division oversees all newborn screening processes in the state. Section 68-5-401, *Tennessee Code Annotated*, requires all infants born in the state to receive specific screenings using a dried blood spot, pulse oximetry for critical congenital heart disease, and hearing for congenital hearing loss. Newborn screening tests account for 76% of all the tests performed by the lab. The department also performs newborn screenings for South America, which make up 1.4% of the lab's testing.

Our initial review revealed no major complaints or concerns about the newborn testing program, and data shows that Tennessee's newborns are receiving tests at rates of 97.4% for hearing, 98.63% for critical congenital heart disease, and 99.93% for dried blood spot.

In fiscal year 2017, according to state lab directors' test data, the lab received an average of 24,039 newborn specimens per quarter, for a total of 96,154 specimens, and conducted an average of 237,504 screening tests per quarter, for a total of 950,014. For the first two quarters of fiscal year 2018, the state lab has received an average of 25,381 specimens, for a total of 50,761, and it conducted an average of 223,298 tests, for a total of 446,595.

Newborn testing is growing each year. The department currently screens approximately 60 diseases. Tests must be completed timely (within 24 to 48 hours); must have proper sampling; and must have adequate staff to operate 6 days per week. Lab management has expressed difficulty recruiting and retaining lab technicians. The Director of Family Health and Wellness mentioned that nearly all babies in Tennessee are tested; the department can match birth certificates with newborns and can determine if a baby was not tested and why. The department tracks sampling error reports that help hospitals improve sample collection, and it

publishes each hospital's sampling report to increase motivation for sending samples to the lab timely. Nurses follow up with families if there are abnormal tests, which are very time-sensitive and critical and can have long-term consequences if certain issues are not addressed promptly. Nurses fulfill shifts that allow the unit to function seven days a week to handle follow-ups.

HIGH CONTAINMENT LABORATORIES AND SELECT AGENTS

In November 2017, the U.S. Government Accountability Office testified about safety lapses at laboratories that conduct research on hazardous pathogens (select agents) that may pose a serious threat to humans, animals, and plants: "These lapses raise concerns about whether federal oversight of these laboratories is effective." The testimony provides information on several areas of concern with the federal monitoring system, including that many BSL-3 and BSL-4 labs (high containment labs that research high-risk pathogens in the forms of viruses, bacteria, chemicals, and toxins) are not being monitored for compliance with safety protocols. The article mentions several incidents of serious security and containment issues. In 2015, the *Tennessean* reported on lapses that occurred in Tennessee high containment facilities; two labs in Memphis required federal action, one for conducting unregistered research and the other for an animal with the bird flu escaping.

In 2016, the U.S. Centers for Disease Control and Prevention (CDC) implemented the Select Agent program and now requires high containment labs to register with the CDC. A May 2017 report from the U.S. Department of Health and Human Services, Office of Inspector General, stated that the CDC completed registration renewal inspections at least once at nearly all registered select agent facilities. Each inspection revealed at least one observation of regulatory noncompliance, the majority of which were related to biosafety and security. The report also noted that nearly 75% of registered labs did not report a theft, loss, or release event between 2013 and 2015, which could mean that labs are underreporting events. Finally, the report stated that draft CDC risk assessment policies evaluate some, but not all, variables that can identify the risk a lab poses to public health and safety.

During audit fieldwork, we learned that the Department of Health's Laboratory Services and Communicable and Environmental Disease and Emergency Preparedness Divisions' management did not have a list of high containment facilities operating within the state. Public health lab directors stated that the department has no oversight of these labs since the CDC has oversight responsibility. However, in March 2018, the CDC gave the Commissioner a list of six high containment labs in the state, three of which are department public health labs.

Biosafety labs are necessary and important tools that help us understand how the most dangerous diseases work in order to develop ways to respond to them and protect public health. It is also necessary for those who respond to emergencies or potential emergencies to have the information they need to enhance their capabilities and to be effective. According to the department, there is no state requirement for it to be notified of high containment labs operating in Tennessee, but the department needs to know about these facilities in order to prepare for emergencies.

APPENDICES

APPENDIX 1
Timeline of Efforts to Use Available Funding
As of August 2018[37]

2011	• Centers for Medicare and Medicaid Services (CMS) begins encouraging states to use Civil Money Penalty (CMP) funds.
2012	• The Office of Health Care Facilities' CMP project proposal is approved and implemented to improve residents' quality of life in several nursing homes.
2014	• The department implements its first Request for Application (RFA) process, which results in 14 applicants and 6 approved projects.
2015	• September: CMS increases CMPs to adjust for inflation. • Two RFAs are held; 16 applications are received, and 2 are approved by CMS.

2016	• In an effort to accelerate fund utilization, the department convenes a team charged with improving distribution of Civil Monetary Penalty Quality Improvement (CMPQI) funds to nursing homes. They identified the following strategies that still drive program activities:
	  • create a strategic plan;
	  • engage stakeholders and increase awareness;
	  • create two dedicated staff positions; and
	  • redesign application processes and procedures to effectively administer the fund.

2017	• June: Tennessee and Oklahoma launch CMP National Reinvestment Network Calls to share best practices across the U.S. • One RFA is held; three applications are received, and 1 is approved by CMS. • November: The department moves CMPQI activities from the Office of Health Care Facilities to the Commissioner's Office, at the direction of the Office of Patient Care Advocacy. • November: The Office of Patient Care Advocacy hires the first director to manage the program fund, at which point policies and procedures are developed, four outstanding contracts are completed, and the Delegated Grant Authority is revised to extend the time allowable for CMP projects and increase the potential funding amount to $1,000,000.
2018	• February: The Office of Patient Care Advocacy hires the first assistant director for the program fund. • The first strategic planning session takes place, developing measurable goals to ensure increased clinical and operational outcomes for nursing homes. • The Commissioner of Health approves the first strategic plan, establishing the department's goal of disbursing $5 million per year by 2023. • To become more customer-focused, CMP staff routinely survey stakeholders; provide technical assistance to applicants and grantees; offer trainings on long-term care issues; develop and update a new program website; disseminate a new email newsletter; perform grantee site visits; host major outreach activities such as workshops and presentations; and convene a newly established CMP Advisory Committee to advise programmatic activities. • The RFA has been opened 5 times since January 2018. 28 total applications have been received (as of August 7, 2018, 11 have been approved at the department level; at the CMS level, 3 have been approved and 8 are pending approval).

[37] Information in the timeline was provided by the department subsequent to our fieldwork. We will plan to test this program further in the next audit given that the department has just updated its strategic plan.

APPENDIX 2
Grant Applications Submitted for Funding
As of April 2018

Applicant	Request for Application Period	Funding Amount	Application Topic	Approved or Denied by the Department of Health	Reviewer Score	Reason for Denial
Cookeville Regional Charitable Foundation	1/11/2018	$190,699.00	Healthcare Associated Infections prevention training for 23 Long Term Centers	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
Diversicare Management Services	1/11/2018	$100,540.00	Funds interdisciplinary bedside rounds for at-risk patients in 4 facilities	Denied	72.67%	Did not score over 80% by evaluators.
LifeBio	1/11/2018	$189,900.00	Staff members in 10 facilities would be trained to engage residents in the LifeBio program; residents would develop an About Me Journal	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
Spring Gate Rehabilitation and Healthcare Center	1/11/2018	$89,381.00	Implementation of the WashSense Infection Surveillance System	Approved*	93.33%	*Awaiting decision by Centers for Medicare and Medicaid Services.
Signature HealthCARE of Putnam County	1/11/2018	$10,645.00	Purchase a pre-recorded Baby Grand Player Piano for dining rooms	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
The Waters of Union City	1/11/2018	$73,100.00	Non-pharmacological interventions for pain (aromatherapy, physical therapy, etc.)	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
Tennessee End-Of-Life Partnership	1/11/2018	$60,960.00	Advance care planning initiative in 12 facilities	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
Tennessee Health Management, Inc. - Jackson Region	1/11/2018	$471,215.29	It's Never 2 Late program in 9 nursing homes	Approved*	93.33%	*Awaiting decision by Centers for Medicare and Medicaid Services.
University of Indianapolis	1/11/2018	$582,500.00	Regional Healthcare Quality Improvement Collaboratives	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
University of Tennessee	1/11/2018	$113,188.00	Implementation of quality care and culture change initiatives in 1-3 nursing homes	Denied		Failed initial application screening due to the application exceeding page-limit requirements.
Vanderbilt University Medical Center	1/11/2018	$307,740.00	Disseminate de-prescribing protocols and support tools to nursing home care providers across the state	Denied		Failed initial application screening due to the application exceeding page-limit requirements.

Source: Department of Health, Patient Advocacy Office.

APPENDIX 3
Health Advisory Entities Members

Traumatic Brain Injury Advisory Council Members	
Member	**Category of Representation**
Lana Bennett	Survivor, Family Member, Primary Care Giver
Avis Easley	Departments of Mental Health and Intellectual and Developmental Disabilities
Alicia Fitts	Survivor, Family Member, Primary Care Giver
Alison Gauld	Department of Education
Mark Heydt, Chair	Healthcare Professional
Rhonda Hicks	Survivor, Family Member, Primary Care Giver
Joanne Morris	Department of Human Services
Brian Potter	Survivor, Family Member, Primary Care Giver
Michelle Staton	Survivor, Family Member, Primary Care Giver

Perinatal Advisory Committee Members	
Member	**Category of Representation**
David Adair	Regional Obstetrical Unit
Sherry L. Bailey	Hospital Administrator
Des Bharti	Regional Newborn Unit
William Block	Regional Obstetrical Unit
Mary Catherine (Kitty) Cashion	Obstetrical Intensive Care Nurse
Ramasubbareddy Dhanireddy	Regional Newborn Unit
Joann L. Ettien	Hospital Administrator
Etoi Garrison	Regional Obstetrical Unit
Mark Shannon Gaylord	Regional Newborn Unit
Susan Hall Guttentag	Regional Newborn Unit
Paul Korth	Hospital Administrator
Gwinnett Ladson	Medical School
Mary Lee Summers Lemley	Newborn Intensive Care Nurse
Lisa Lowery-Smith	Regional Newborn Unit
Giancarlo Mari	Regional Obstetrical Unit
Morgan McDonald	Tennessee Department of Health Public Health Agency
Marilyn Robinson	Specialist in Neonatology (Private Practice)
Grant Studebaker	Family Physician
Lenita H. Thibault	Specialist in Obstetrical Conditions (Private Practice)
Craig V. Towers	Regional Obstetrical Unit
Leah Williamson	General Public

Genetic Advisory Committee Members	
Member	**Category of Representation**
Maria del Pilar Aguinaga	Sickle Cell Center
Manoo Bhakta	Sickle Cell Center
Tonya Bowman	Member-at-Large (Parent)
Yvonne M. Carroll	Sickle Cell Center
Ellen Clayton	Member-at-Large (Physician/Attorney)
George J. Dizikes	TDH Lab Director
Jennifer A. Domm	Member-at-Large (Physician)
Kevin C. Ess	Pediatric Neurologist
Yasmin West Khan	Member-at-Large (Pediatric Immunology)
MJ Hajianpour	Genetic Center
Rizwan Hamid	Genetic Center
Jared A. Hamm	Genetic Center
Morgan McDonald	Chief Medical Officer Designee
William Russell	Member-at-Large (Endocrinology)
Cathy Stevens	Genetic Center
Dennis Clifton Stokes	Member-at-Large (Pediatric Pulmonologist)
Jeffrey Towbin	Member-at-Large (Pediatric Cardiologist)
William F. Walsh	Member-at-Large (Neonatologist)
Jewell Ward	Genetic Center

Advisory Committee for Children's Special Services Members	
Member	**Category of Representation**
David Hall	Member (General Pediatrics)
Sara Hanai	Member (Consumer)
Kimberly Howerton	Member (Family Practitioner)
James Johns	Member (Pediatric Cardiology)
Benjamin Mixon	Member (Pediatric Hematology-Oncology)
Barbara Stewart	Member (Pediatric Pulmonology)
Vacant	Member

Tennessee Medical Examiner Advisory Council	
Member	**Category of Representation**
Robert Batson	Licensed Funeral Director
Jake Bynum	Weakley County Mayor
David D. Darden	County Medical Examiner (East Tennessee)
Tony R. Emison	County Medical Examiner (West Tennessee)
Benjamin J. Figura	Forensic Pathologist Forensic Center
Julia Goodin	State Chief Medical Examiner
Dewayne Johnson	Assistant Director to the Tennessee Bureau Investigation
Feng Li	Forensic Pathologist Forensic Center
Lorraine MacDonald	County Medical Examiner (Middle Tennessee)
James Metcalfe	Forensic Pathologist Forensic Center
Darinka Mileusnic	Forensic Pathologist Forensic Center
Edward C. Miller	District Public Defender
Marco A. Ross	Forensic Pathologist Forensic Center
Eugene Hunt Scheurman	Forensic Pathologist Forensic Center
Amy Weirich	District Attorney General

Source: Department of Health.

APPENDIX 4
Financial Information for the Department of Health

Budget and Actual Expenditures and Revenues
Fiscal Year Ending June 30, 2017

		FY 2017 Recommended*	FY 2017 Actual**
Expenditures	Payroll	$209,146,300	$196,414,800
	Operational	$400,137,100	$395,149,300
	Total	$609,283,400	$591,564,100
Revenues	State	$196,225,300	$166,979,900
	Federal	$251,193,500	$253,350,900
	Other	$161,864,600	$171,233,300
	Total	$609,283,400	$591,564,100

* Source: Tennessee State Budget Fiscal Year 2016-2017.
** Source: Tennessee State Budget, Fiscal Year 2018-2019.

Budget and Estimated Expenditures and Revenue
Fiscal Year Ending June 30, 2018[38]

		FY 2018 Recommended*	FY 2018 Estimated**
Expenditures	Payroll	$217,707,100	$233,121,900
	Operational	$406,359,400	$421,234,100
	Total	$624,066,500	$654,356,000
Revenues	State	$196,170,300	$213,192,500
	Federal	$245,307,600	$252,658,000
	Other	$182,588,600	$188,505,500
	Total	$624,066,500	$654,356,000

* Source: Tennessee State Budget Fiscal Year 2017-2018.
** Source: Tennessee State Budget, Fiscal Year 2018-2019.

[38] During our audit work, fiscal year ending June 30, 2018, had not closed; therefore, we presented the estimated revenues and expenditures for that period.

APPENDIX 5
Business Unit Codes

Code	Title
34300	Department of Health
34305	Health Licensure and Regulation
34306	Trauma System Fund
34307	Emergency Medical Services
34310	Health Related Boards
34308	Laboratory Services
34320	Policy, Planning, and Assessment
34339	General Environmental Health
34347	Family Health and Wellness
34349	Communicable and Environmental Disease and Emergency Preparedness
34352	Community and Medical Services
34353	Women, Infants, and Children
34360	Health Services

APPENDIX 6
Counties Not Regularly Submitting Reports of Investigation
As of October 5, 2018

Counties Not Regularly Submitting Reports of Investigation to the Office of the State Chief Medical Examiner
Bedford
Campbell
Carroll
Chester*
Claiborne
Crockett
Dyer
Hardeman
Hardin
Lake
Lewis
Loudon
Pickett
Polk
Scott**
Sequatchie
Tipton
Trousdale

Source: The Office of State Chief Medical Examiner.

*Chester County will begin to provide the office with reports starting in October 2018.
**Scott County has agreed to provide all 2018 reports.