

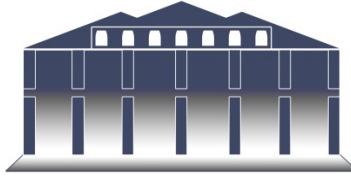
**Improvements to Inmate Healthcare
Reimbursement and Internal Processes Could Save
\$5.6 Million Annually**



**Final Report to the Joint Legislative
Program Evaluation Oversight Committee**

Report Number 2018-08

September 17, 2018



Program Evaluation Division
North Carolina General Assembly
Legislative Office Building, Suite 100
300 North Salisbury Street
Raleigh, NC 27603-5925
919-301-1404
www.ncleg.net/PED

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NORTH CAROLINA GENERAL ASSEMBLY
Legislative Services Office

Paul Coble, Legislative Services Officer

Program Evaluation Division
300 N. Salisbury Street, Suite 100
Raleigh, NC 27603-5925
Tel. 919-301-1404 Fax 919-301-1406

John W. Turcotte
Director

September 17, 2018

Senator Brent Jackson, Co-Chair, Joint Legislative Program Evaluation Oversight Committee
Representative Craig Horn, Co-Chair, Joint Legislative Program Evaluation Oversight Committee

North Carolina General Assembly
Legislative Building
16 West Jones Street
Raleigh, NC 27601

Honorable Co-Chairs:

The 2015–17 Work Plan of the Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to examine the efficiency and economy of medical and dental services provided for North Carolina state prison inmates. This report is the first in a four-part series and focuses on non-pharmacy-related aspects of inmate healthcare.

I am pleased to report that the Department of Public Safety cooperated with us fully and was at all times courteous to our evaluators during the evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read "J. W. Turcotte".

John W. Turcotte
Director



PROGRAM EVALUATION DIVISION

NORTH CAROLINA GENERAL ASSEMBLY

September 2018

Report No. 2018-08

Improvements to Inmate Healthcare Reimbursement and Internal Processes Could Save \$5.6 Million Annually

Summary

The State of North Carolina operates 57 prisons and provides medical, mental health, dental, and pharmacy services to inmates at a cost of \$322 million annually, an \$89 million increase from 10 years ago. The State spent \$6,923 per inmate on healthcare in Fiscal Year 2014–15, which was more than 31 other states and 21% more than the national median of \$5,720.

The Department of Public Safety's Health Services division (DPS Health Services), which is partially funded by lapsed salaries for vacant positions, cannot demonstrate results from its cost-containment efforts. Funding for DPS Health Services is partially reliant on vacant positions outside the division's budget that are not reflected in its own appropriated funds. Further, its budgeting method does not facilitate accountability. The division undertakes several efforts to contain costs but insufficient analysis of available data prevents it from demonstrating past or anticipated successes or identifying areas for improvement.

North Carolina pays more than other states for inmate healthcare services delivered by community providers. Statutory and contractual payment arrangements cause the State to reimburse community providers at rates higher than other states. Modifying these arrangements to be more in line with other states could save \$4.1 million annually.

Chronically vacant health services positions and subsequent reliance on contract staff costs \$25 million annually, and the limited use of telemedicine has contributed to unnecessary costs. Efforts by DPS Health Services to fill vacancies lack evidence of success and lead to a dependence on higher-cost contractors. The limited use of telemedicine contributes to an estimated \$1.4 million in unnecessary annual costs.

DPS Health Services's methods for pursuing federal Medicaid funding for community services has been unsuccessful, increasing state costs. Lack of oversight and proactive cost containment has led to DPS failing to receive federal Medicaid funds for qualifying community services and staff time, thereby forgoing potential annual savings of \$136,000.

The General Assembly should direct DPS Health Services to conduct a salary study of healthcare positions, seek federal reimbursement for Medicaid-related staff activities, modify data collection and submission methods for Medicaid applications, develop a plan for implementing telemedicine, and improve supply management practices and services provided at the Central Prison Healthcare Complex. Further, the General Assembly should modify state law to reduce community provider reimbursement rates and consider establishing a data analysis position and realigning DPS Health Services's base budget.

Purpose and Scope

The 2015–17 Work Plan of the Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to examine the efficiency and economy of medical and dental services provided for North Carolina state prison inmates. This evaluation only includes healthcare services provided in adult prison facilities and does not include services provided to youth offenders residing in youth detention centers or adults serving temporary sentences in county jails through the State's Misdemeanor Confinement Program.

This report is the first in a four-part series on the efficiency and economy of inmate healthcare and focuses on non-pharmacy-related aspects of inmate healthcare as managed and delivered by the Department of Public Safety's Division of Health Services (DPS Health Services), which is responsible for the provision of health services to the State's inmates.

This evaluation addressed four research questions:

1. How does the State deliver healthcare services to inmates?
2. How efficient is the provision of healthcare services to inmates?
3. What measures has the State taken to contain inmate healthcare costs?
4. How could the provision of inmate healthcare services be more efficient?

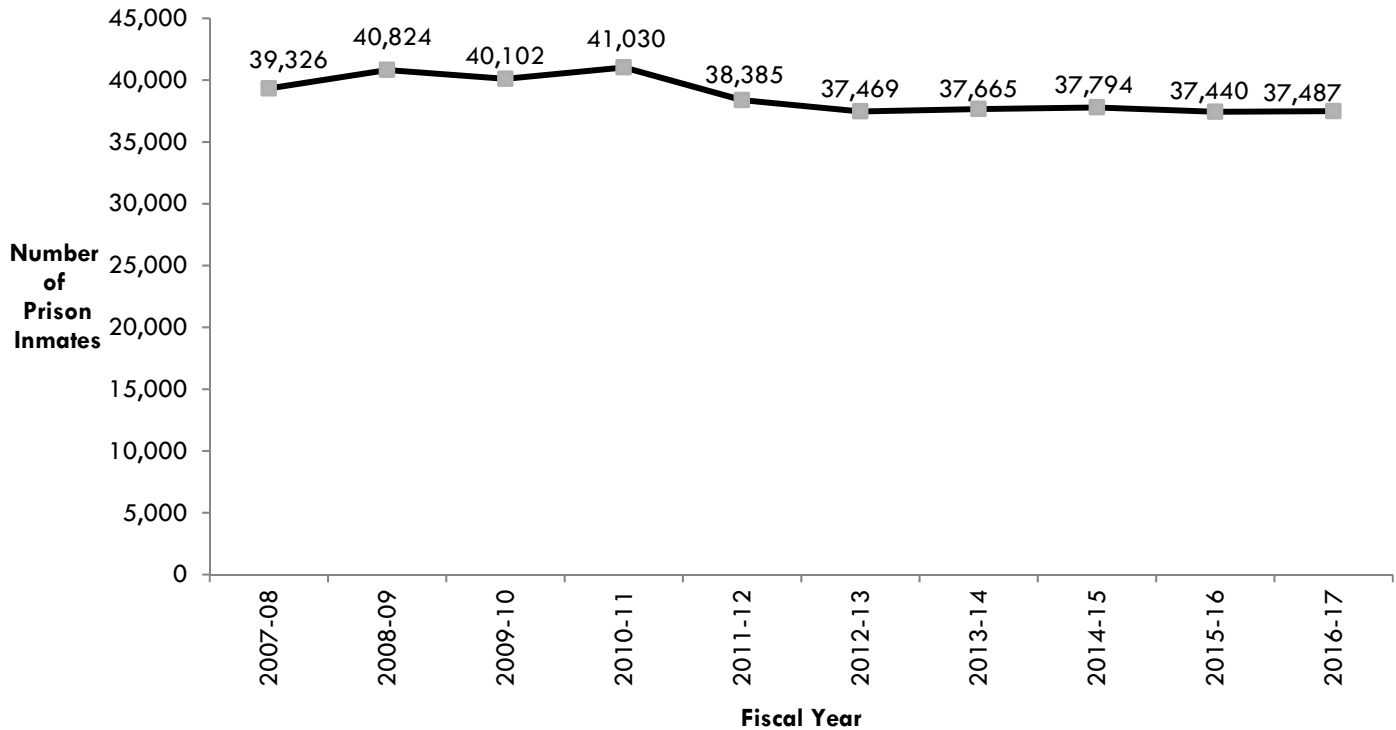
The Program Evaluation Division collected and analyzed data from several sources, including

- queries and interviews of DPS staff;
- data on prison population demographics, DPS expenditures and revenues, use of outside healthcare services, use of healthcare supplies, and DPS personnel;
- site inspections of state prison healthcare facilities;
- purchasing and contracting data from the Department of Administration (DOA);
- interviews and queries of state prison healthcare staff, stakeholders, Department of Health and Human Services (DHHS) staff, county department of social services staff, staff from other states' corrections departments, and staff from national organizations;
- historic Medicaid eligibility determination and claims data from DHHS;
- vehicle utilization data from DOA and DPS; and
- a review of data and reports from other states and national organizations on efforts to contain inmate healthcare costs.

Background

North Carolina established its adult corrections system to provide custody, supervision, and treatment to criminal offenders. As of June 2017, North Carolina prisons provided supervision and services to 37,487 inmates across 57 prisons.¹ As Exhibit 1 shows, the State’s total number of inmates has remained relatively stable during the past decade but has slightly decreased since Fiscal Year 2010–11, when the State supervised 41,030 inmates. The North Carolina Sentencing and Policy Advisory Commission projects North Carolina’s inmate population will increase by approximately 1,400 inmates in the next seven years.

Exhibit 1: North Carolina’s Prison Population Has Declined Slightly Since Fiscal Year 2010–11



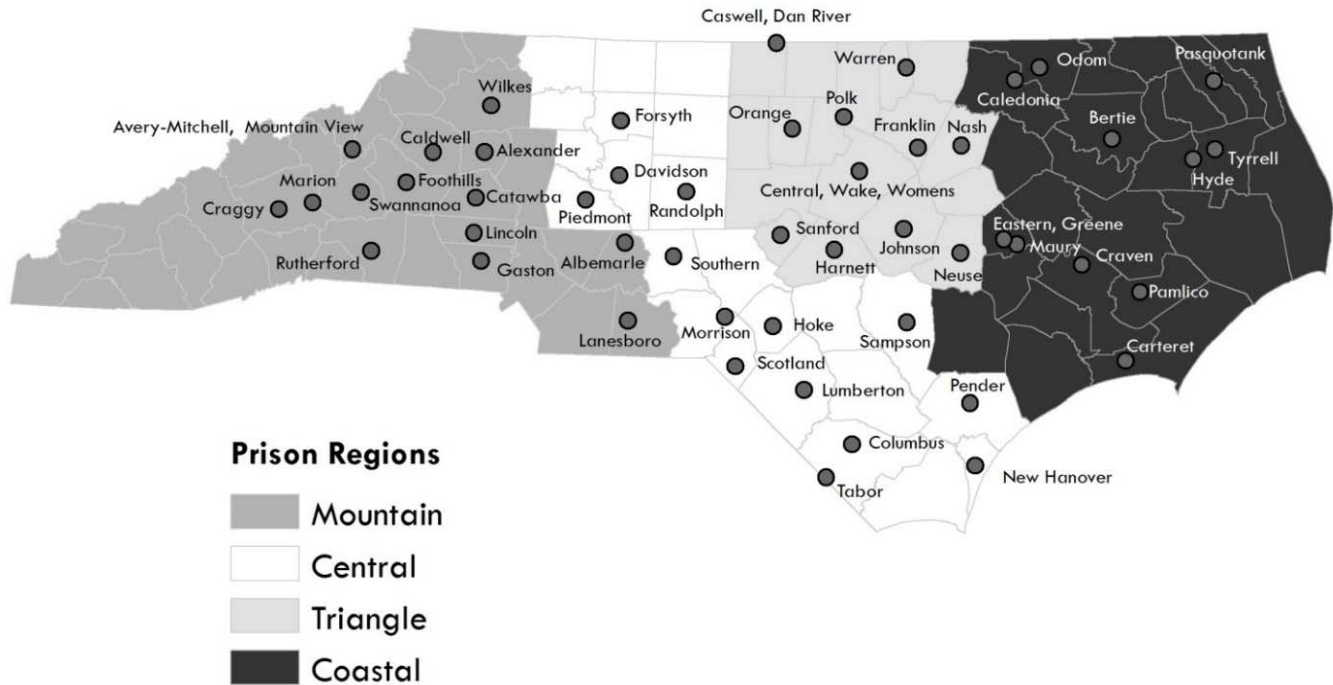
Note: Only adult offenders housed in one of the State’s prison facilities are included in the inmate population; youthful offenders housed within detention centers or offenders participating in the State’s Misdemeanant Confinement Program are not included.

Source: Program Evaluation Division based on data provided by DPS.

Exhibit 2 shows the locations and distribution of North Carolina’s adult prison facilities. The prison system is divided into four regions for management purposes.

¹ Two of these prison facilities are specialized units referred to as Confinement in Response to Violation units.

Exhibit 2: North Carolina's 55 Adult Prison Facilities Are Dispersed Across Four Regions



Note: All prison facilities serve only male inmates except for Swannanoa Correctional Center for Women, Southern Correctional Institution, Eastern Correctional Institution, and the North Carolina Correctional Institution for Women. The exhibit reflects prisons in operation as of June 2017 and does not show the two specialized units (referred to as Confinement in Response to Violation units) that are located in Burke and Robeson County.

Source: Program Evaluation Division based on data provided by DPS.

In Fiscal Year 2016–17, the State spent \$1.3 billion on incarcerating inmates. Federal and state laws require prison staff to provide inmates with services such as custody, supervision, treatment, and healthcare. Prisons perform a variety of activities in providing these services, ranging from educational programs to medical care.

Each prison holds at least one custody-level classification, which indicates the level of offenders it can house. As Exhibit 3 shows, on a per-inmate basis and including all services, the State spent \$97 per day, or \$35,252 for the year, for the average inmate in Fiscal Year 2016–17.²

² Some prisons house inmates across custody levels.

Exhibit 3

North Carolina Spends \$97 Per Day, or \$35,252 Per Year, to Provide All Services to the Average Inmate in the Prison System

Inmate Custody Level	Average Daily Cost of All Services	Total Annual Cost of All Services
Minimum	\$ 85	\$31,091
Medium	99	35,949
Close	114	41,705
Average	\$ 97	\$35,252

Notes: Dollar figures were rounded to the nearest whole number as of June 2017.

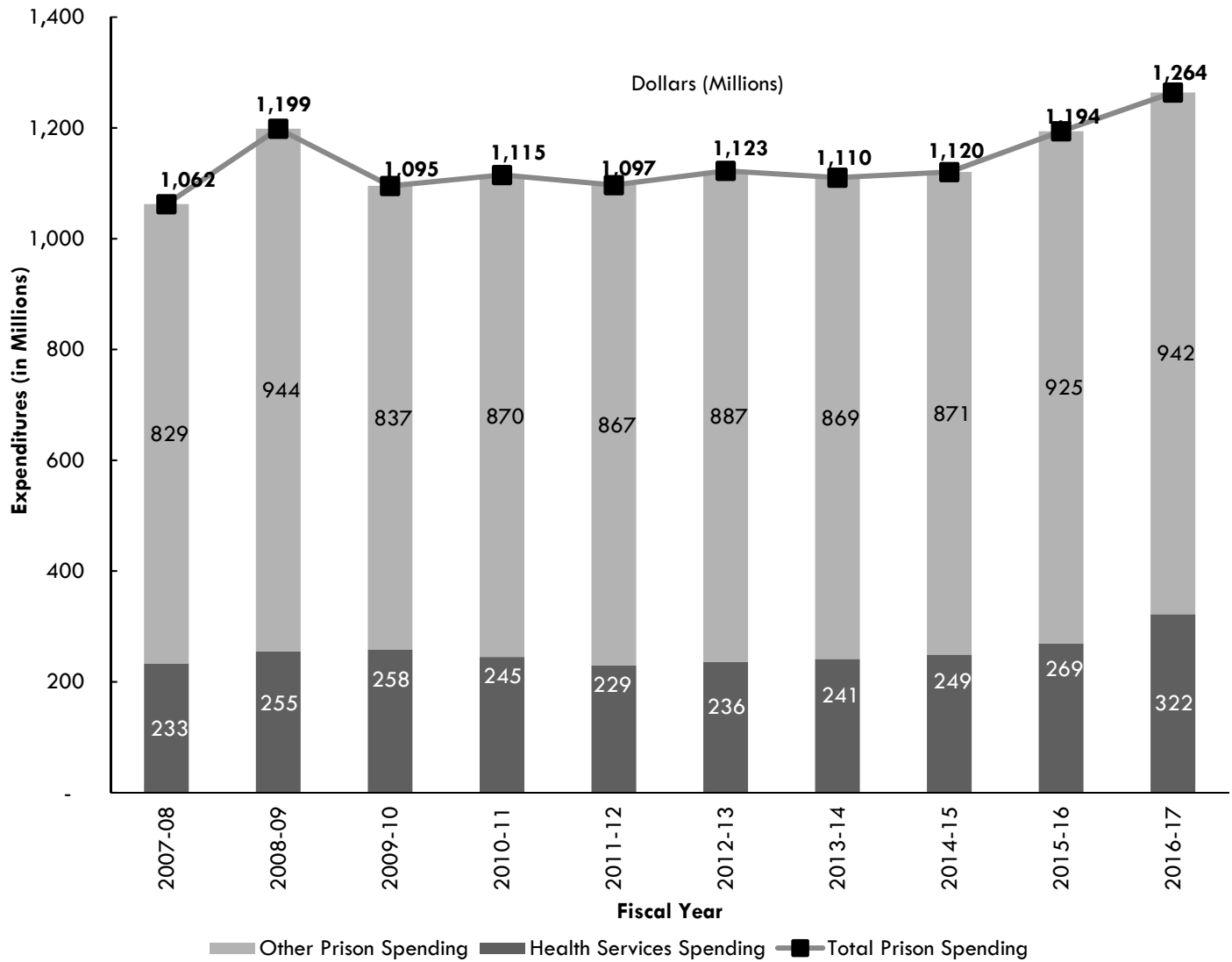
Source: Program Evaluation Division based on data from DPS.

As Exhibit 4 shows, total spending for inmates has increased by more than \$200 million in the last 10 years, from \$1.1 billion in Fiscal Year 2007–08 to \$1.3 billion in Fiscal Year 2016–17. This increase in expenditures has occurred even as the inmate population has remained steady and has actually declined within the past six years.

One significant expenditure is inmate healthcare, which includes medical care, mental health services, substance abuse treatment, and dental services. As Exhibit 4 also shows, 44% of the increase in expenditures for inmate services during the past decade is attributable to the rise in healthcare spending, which has grown from \$233 million in Fiscal Year 2007–08 to \$322 million in Fiscal Year 2016–17. The U.S. Supreme Court has found that prisoners have a constitutional right to adequate medical attention and services. The Court's finding is based on rights enumerated in the Eighth Amendment, and the Court has specified that these rights are violated when corrections officials display "deliberate indifference" to an inmate's medical needs.³

³ Estelle v. Gamble, 429 U.S. 97 (1976).

Exhibit 4: Despite a Slightly Decreasing Prison Population, Spending on Inmate Services Has Increased by More than \$200 Million Since Fiscal Year 2007–08



Note: Expenditures have not been adjusted for inflation. According to DPS staff, the increase in total corrections spending in Fiscal Year 2008–09 was due largely to federal funds that DPS received through the American Recovery and Reinvestment Act, and the decline in subsequent years was related to methods of accounting and transferring such receipts, as well as reductions and reversions mandated by the Governor’s office. Decreases in expenditures also coincide with budget reductions enacted by the General Assembly. Values for categories shown may not add up to total due to rounding.

Source: Program Evaluation Division based on data provided by DPS.

State departments of corrections are responsible for ensuring inmates serving sentences in their prisons receive an adequate level of care.⁴ In North Carolina, DPS’s Health Services division (DPS Health Services) is responsible for providing these Constitutionally-mandated health services for inmates in state prisons. Established in 1994, the Health Services

⁴ In instances in which states fail to provide adequate care, the state is vulnerable to litigation. North Carolina’s prisons have been the subject of several legal matters related to the provision of adequate healthcare services for inmates.

division consists of seven programmatic areas overseen by a Section Chief, who is charged with ensuring adherence to applicable federal and state laws in the provision of healthcare to inmates in the state prison system. Exhibit 5 lists each programmatic area and provides a brief description of its work.

Exhibit 5: Seven Programs within DPS Health Services Support Inmate Healthcare

Health Services Program	Program Description
Medical Services	The medical services program provides comprehensive health services for the care and treatment of inmates with a variety of physical (medical) disorders. Units within this program include nursing, provider services, outpatient services, inpatient services, specialty care, and infectious diseases. This unit provides entrance screening, periodic examinations, emergency care, sick calls, and medication administration. Secondary care services include specialty clinics, consultations, procedures, and skilled nursing care.
Mental Health	The mental health program provides comprehensive psychiatric services to adult offenders with mental illness or behavioral disturbance(s)/abnormalities, substance use disorders, and intellectual and/or other developmental disabilities. Programs are based on a multi-disciplinary treatment team model working in coordination and conjunction with nursing, medical, social work, custody, behavioral health, and programs staff.
Behavioral Health	The behavioral health team provides comprehensive treatment programs to adult offenders with mental illness or behavioral disturbance(s)/abnormalities, alcohol and chemical dependency issues, and intellectual and/or developmental disabilities. Treatment programs are based on a multi-disciplinary treatment team model, which includes, but is not limited to, psychology, nursing, social work, medical, custody, psychiatric, and programs staff.
Dental Services	Dental services is comprised of a group of trained oral health professionals who provide dental treatment to offenders.
Operations	The operations section fulfills a range of administrative duties and responsibilities in support of the total medical missions of all healthcare disciplines. This support package includes, but is not limited to, human resources consultation, position management, strategic planning, contract development and monitoring, release of information requests, and paper medical records.
Risk Management/ Standards	The risk management/standards program enhances patient care, reduces risk of harm, and ensures that professional standards of care are consistently applied. The program accomplishes these objectives through the identification, analysis, control/avoidance, and minimization or elimination of unacceptable risks and through ongoing auditing/review and reporting of healthcare practices and findings to agency leadership.
Clinical Informatics	This unit provides training to front-line staff across the state and ongoing support via a 24/7 Helpdesk for the clinical information system. This unit provides consultation with end users of all disciplines and provides management to coordinate program changes and assist with associated healthcare policy writing. Additionally, it provides clinical data analysis and data extraction for ongoing quality assurance monitoring.

Source: Program Evaluation Division based on data provided by DPS Health Services.

There has been recent interest in containing costs for inmate healthcare both in North Carolina and across the country. Numerous factors contribute to high correctional healthcare costs. Compared to the general citizenry, costs of inmate healthcare are higher for a number of reasons:

- **Inmates often enter prison with a care deficit and with untreated pre-existing conditions.** The availability of health services within prisons sometimes represents the first time an inmate has obtained treatment for a condition such as obesity or high blood pressure. In some instances, inmates have never seen a dentist prior to entering prison. This care deficit presents uncontrolled health conditions that DPS Health Services staff must address to ensure they are meeting the Constitutional mandate to provide adequate health services to inmates.
- **Inmates seek health services resources for secondary gain.** In addition to the primary health benefits inmates receive from DPS Health Services staff, some inmates may seek and obtain these services for “secondary gain” purposes, such as to relieve boredom, get out of attending work, interact with non-custody staff or other inmates, or obtain special attire such as more comfortable shoes. These secondary gains take up staff time and potentially delay treatment for other inmates who have a primary need to receive health services, correspondingly increasing costs.
- **Inmates are more likely to have communicable diseases such as HIV/AIDS, hepatitis, and tuberculosis.** The Centers for Disease Control and Prevention reports that inmates are five times more likely than the general populace to have HIV. About 1% of Americans have chronic Hepatitis C, whereas the rate in US prisons is 17.4%. The inmate population is also more likely to have tuberculosis than the general public. In 2003, 0.7% of the total US population was confined within prisons and jails, yet 3.2% of all tuberculosis cases nationwide occurred among residents of correctional facilities.
- **Mental health and substance abuse also are more common among inmates than the general populace.** In 2006, the Bureau of Justice Statistics reported that 49% of all inmates in state prisons displayed signs of mental disorder. The prevalence of mental disorders among the broader citizenry is estimated to be approximately 11%. Likewise, an estimated 80% of state prison and jail inmates are believed to have serious substance abuse issues, whereas among all adults the substance dependence or abuse rate is approximately 8% in 2011. According to the Pew Charitable Trusts, such conditions place a significant burden on state correctional budgets.
- **The number of inmates who are age 50 or older is increasing.**⁵ Research has shown that older inmates are estimated to cost between two and nine times more than younger prisoners, primarily due to healthcare spending differences.⁶ Since Fiscal Year 2012–13, the number of North Carolina inmates age 50 or

⁵ There is consensus among correctional experts, criminologists, and the National Institute of Corrections that 50 years of age is the appropriate point to mark when a prisoner becomes “aging” or “elderly.” DPS Health Services policies designate an aging or elderly inmate as one who is at least 65 years old.

⁶ Ahalt, C., et. al. 2013. Paying the Price: The Pressing Need for Quality, Cost and Outcomes Data to Improve Correctional Healthcare for Older Prisoners. *Journal of American Geriatric Society*. 61(11): 2013-19. A primary reason for the discrepancy in these estimates is the age criteria that states use to define “older” inmates.

older has increased by 16%. Five years ago, 18% of the State's inmates were age 50 or older, whereas today 22% of the inmate population is 50 or older.

As the number of prisoners age 50 and older increases, so does the number and severity of chronic health conditions among inmates.

Chronic conditions include cancer, high blood pressure, stroke-related problems, diabetes, heart-related problems, kidney-related problems, arthritis, asthma, and cirrhosis of the liver. Approximately 40% of the general prison population has one or more chronic health conditions, but nearly 73% of inmates age 50 and older have at least one of these conditions.

The effects of these chronic illnesses are compounded because incarcerated individuals, on the whole, experience accelerated aging. On average, incarcerated individuals develop chronic health conditions and age-related disabilities 10 to 15 years earlier than the general public. The need for medication, medical care, and additional staffing to manage chronic conditions for aged inmates has contributed to the increased cost of providing healthcare in state prisons.

In 2007, 11% of North Carolina's inmate population was age 50 or older. At that time, the State spent four times more on healthcare for these inmates than for inmates younger than age 50, and expenditures for older inmates accounted for nearly 30% of the State's total correctional healthcare budget.⁷

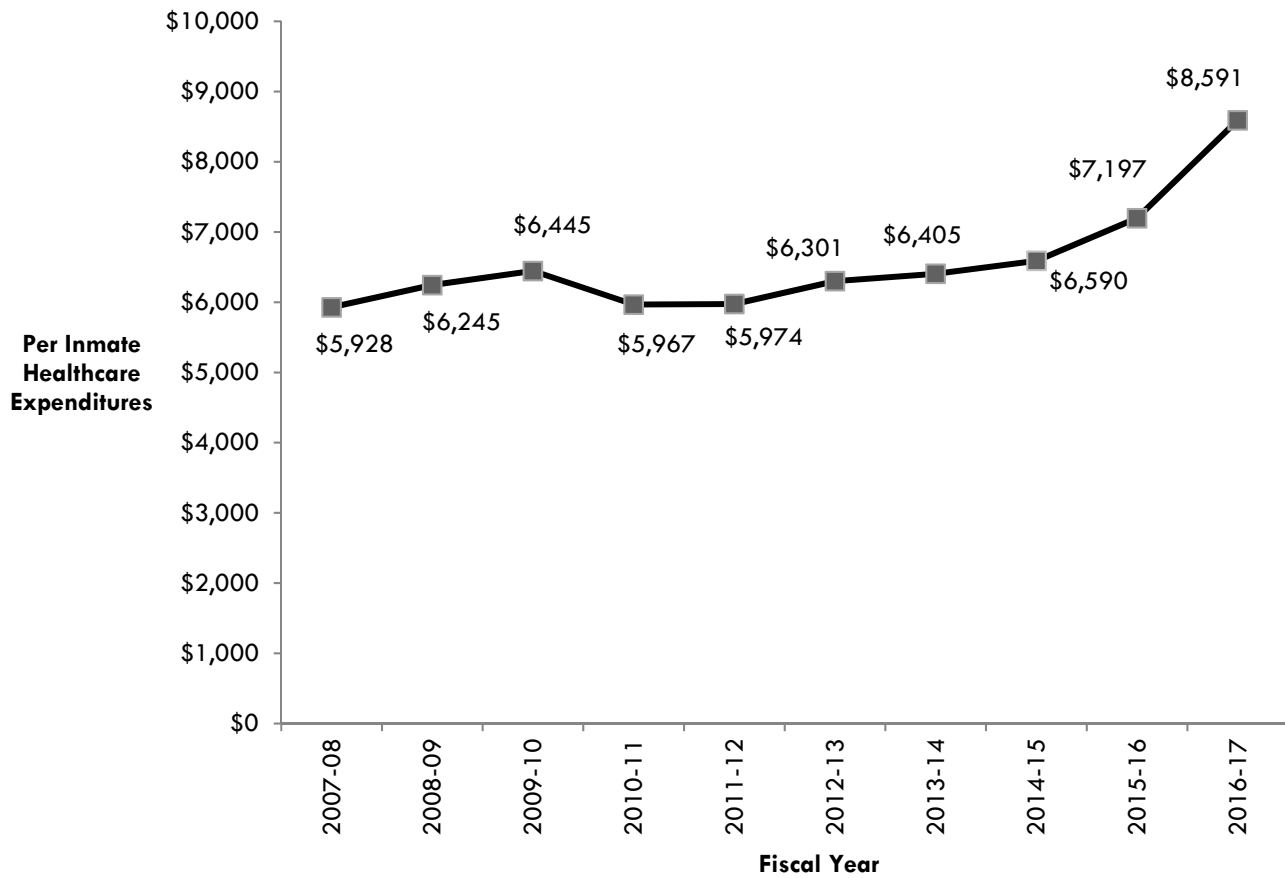
These and other factors have contributed to a 45% increase in per-inmate spending on health services in the last 10 years. State expenditures for inmate health services have increased by \$89 million in the past 10 years, from \$233 million in Fiscal Year 2007–08 to \$322 million in Fiscal Year 2016–17. Spending on inmate healthcare represented 25% of total DPS expenditures for inmates in Fiscal Year 2016–17.⁸

As Exhibit 6 shows, the average annual cost of providing health services to an inmate has increased by 45% (\$2,663) during the past decade, from \$5,928 to \$8,591 per inmate. Average per-inmate healthcare expenditures have increased relative to the prior year average in 7 of the last 10 fiscal years.

⁷ Studies in other states have shown similar patterns. Michigan's elderly prison population costs four times more than offenders in their twenties; California's elderly population costs three times more than those under 50 years of age. The US Bureau of Prisons estimates that in 2013, 19% of its total budget was spent on incarcerating aging inmates.

⁸ In a 2013 report, the Urban Institute estimated that typically 9% to 30% of corrections costs go to inmate healthcare.

Exhibit 6: The State Spent 45% More on Health Services Per Inmate in Fiscal Year 2016–17 Than It Did 10 Years Ago



Note: Per-inmate health expenditures are calculated by dividing total healthcare expenditures by the number of inmates for each respective Fiscal Year. Expenditures have not been adjusted for inflation.

Source: Program Evaluation Division based on data provided by DPS.

Median expenditures nationwide per inmate for healthcare services was \$5,720 in 2015. Annual healthcare spending per inmate varies widely among states, ranging from \$19,796 in California to \$2,173 in Louisiana.⁹ As shown in Appendix A, North Carolina ranked 18th in the nation at \$6,923 per inmate in Fiscal Year 2014–15, a five percent decrease from Fiscal Year 2009–10 when per-inmate healthcare spending was \$7,296.¹⁰

⁹ According to the Pew Charitable Trusts, the Bureau of Justice Statistics identified a number of factors that possibly contribute to variations in inmate healthcare spending across states, including pre-incarceration access to adequate community care, regional medical prices, staffing and compensation levels, facility capacity and related economies of scale, and incidences of high-risk behaviors and associated disease burdens. One potential factor explaining Louisiana’s lower per-inmate healthcare expenditures is that the state’s Medicaid agency, rather than the state’s department of corrections as is the case in California, pays for eligible off-site inpatient hospitalizations.

¹⁰ Per-inmate healthcare expenditure discrepancies between the national comparison data provided by the Pew Charitable Trusts and expenditure data obtained by the Program Evaluation Division from the North Carolina Accounting System and DPS are attributable to differences in census dates and categories of expenditures included for inmate healthcare.

Given these increasing expenditures, the General Assembly and the Office of the State Auditor have explored methods to contain inmate healthcare costs since the late 2000s. During the last several years, the General Assembly has required DPS to implement a number of efforts to contain inmate healthcare costs. In addition, the State Auditor has issued several reports related to inmate healthcare and cost containment. Appendix B shows a timeline of actions taken by the General Assembly and reports issued by the State Auditor that were related to inmate healthcare. Some of the most significant cost-containment efforts recommended or required by the General Assembly over the past several years include

- requiring inmates to receive outside-of-prison services from providers participating in the State Health Plan;
- establishing a medical release program, whereby inmates meeting certain medical criteria who did not commit particular crimes are granted parole prior to serving their full sentences;
- requiring DPS to issue a request for proposals to outsource its claims processing function for bills incurred while inmates were treated in community hospitals;
- establishing a maximum rate of reimbursement for private community providers;
- directing DPS to establish and implement protocols to pursue Medicaid eligibility for prisoners for partial federal reimbursement of outside services; and
- establishing quarterly reporting requirements on progress towards reducing inmate healthcare costs, including the use of contract providers.

Because the General Assembly modified state law regarding many of the practices discussed above, much of current law centers on the reimbursement of private community providers for services rendered to inmates at community facilities because these inmates' needs exceeded DPS Health Services's capabilities. In these instances, state law requires DPS to pay the lesser of 70% of a provider's then-current prevailing charge or two times (200% of) the then-current Medicaid rate for a given service an inmate receives at a community facility.¹¹ However, state law does not preclude DPS from

- contracting with providers for services that can demonstrate greater cost avoidance, or
- reimbursing providers for services at rates that are less favorable to the State but ensure continued access to care.

Further, state law requires DPS to report quarterly to the Joint Legislative Oversight Committee on Justice and Public Safety and the chairs of the House and Senate Appropriations Committees on Justice and Public Safety on several aspects of inmate healthcare costs, including

- number and locations of hospitalizations,

¹¹ N.C. Gen Stat. § 143B-707.3.

- volume and type of services for inmates both eligible and ineligible for Medicaid,
- costs of services at certain facilities,
- timeliness of claims processing, and
- information on hospital facilities with contracts to provide services.¹²

Given increasing expenditures and continued legislative interest in developing methods to contain costs, this evaluation explores the efficiency and economy of inmate healthcare in North Carolina's prison system.

Findings

Finding 1. The Department of Public Safety's Health Services division undertakes activities to promote efficiency and effectiveness but due to a lack of planning, analysis, and oversight cannot empirically demonstrate past or anticipated successes.

To summarize the finding below, the work of the Department of Public Safety's Health Services division (DPS Health Services) is conducted with an ineffective performance management system that lacks formal monitoring and reporting mechanisms. DPS has undertaken several efforts to reduce the costs of inmate healthcare, but these initiatives often fail to include projected and achieved cost savings. DPS Health Services also lacks staff to perform data collection and analysis that could assist in identifying factors that increase costs.

The mission of DPS Health Services is to provide access to quality, cost-effective healthcare that is rendered by competent healthcare professionals. With this mission, the division has the following goals:

- to uphold the mission and goals of the North Carolina Division of Adult Correction;
- to view correctional facilities as public health stations that significantly impact the health status of the larger community;
- to manage care so as to improve the health status of the inmates and citizens of North Carolina, ensuring that the best value is obtained for the tax dollars spent;
- to provide care consistent with community standards; and
- to focus on the internal and external customers served by the North Carolina Division of Adult Correction.

The goals and mission of an organization drive its performance management system. A performance management system represents an ongoing, systematic approach to improving results through evidence-based decision making, continuous organizational learning, and a focus on accountability for results. Performance management systems help ensure programs and activities are effectively contributing to the achievement of strategic goals. Information from such systems can be used by employees to better understand how their individual jobs relate to one or more of the organization's objectives and goals. Agency managers can use

¹² N.C. Gen Stat. § 143B-707.3(c).

performance management information to identify problem areas and respond with appropriate actions.

An effective performance management system should include the following components:

- **Program objectives.** Objectives are measurable, time-based statements of intent that are used to monitor progress towards achievement of strategic goals.¹³
- **Activity outputs.** Activity outputs provide information on the efficient use of available resources.
- **Procedures.** Procedures document the processes for each program activity as it is intended to be performed. Well-designed and well-implemented procedures help to ensure resources are efficiently used to produce outputs that contribute to organizational objectives.
- **Monitoring.** Monitoring involves regular reporting on the performance of programs and activities.

DPS Health Services does not have all of the necessary components of an effective performance management system. The Program Evaluation Division conducted a review of the performance management system used by DPS Health Services for the delivery of inmate healthcare. This review found DPS Health Services does not systematically and regularly maintain all of the information necessary for an effective performance management system. Instead, central DPS Health Services staff primarily rely on an informal structure of presentations and briefings from section staff on requested topics.

DPS Health Services staff monitor their progress towards achieving division goals in a variety of ways, but there is no systematic and regular evaluation of performance. Program Evaluation Division staff found that there is no formal mechanism to monitor and report progress toward achievement of goals and objectives with available output data. DPS Health Services staff stated that performance data on objectives is not systematically collected and maintained and that only indicators of interest are discussed during management meetings. This lack of central data collection and monitoring of each programmatic area limits the ability of central DPS Health Services staff to identify and correct issues that adversely affect performance.

DPS has undertaken several efforts to reduce costs or increase effectiveness without empirical evidence of potential or realized benefits. Although DPS Health Services staff have identified several cost drivers, the division's lack of a formal, effective performance management system limits its ability to analyze factors that increase costs. For example, limited data collection on factors such as provider referral rates to outside services or prisons with higher-than-average rates of emergency department visits does not facilitate corrective action.

¹³ This definition of program objectives is from *Planning Guidelines for North Carolina State Government*, which is published by the Office State Budget and Management.

Further, DPS Health Services staff pursue efforts to contain costs without sufficient analysis to demonstrate potential cost savings or the costs of implementing such efforts. Exhibit 7 shows three such efforts undertaken by DPS in which efficiencies gained from implementation are uncertain.

Exhibit 7: DPS Cost Containment Initiatives Lack Estimated and Demonstrated Cost Savings

Effort or Initiative	Description of Effort	Potential Limitations	Estimated Cost Savings When Initiated	Demonstrated Cost Savings
Remissioning of Prisons	Each prison has a custody and medical mission, and prisons are routinely remissioned by DPS for reasons such as to accommodate changes in the prison population or for medical purposes.	DPS remissions prisons without adequate planning and consideration of health services staff and resources; remissioning also reportedly increases reliance on higher-cost contract staff.	No	No
Opening of Central Prison Healthcare Complex (CPHC)	<p>CPHC is a five-story, 167,000 square-foot hospital with 120 inpatient beds and outpatient clinics that was anticipated to</p> <ul style="list-style-type: none"> • reduce custody officer time needed to transport and monitor inmates at community facilities, • reduce real or perceived risks to the general community, and • reduce redundant diagnostic laboratory tests that cannot be accessed by community hospital staff. 	<p>DPS Health Services does not know the relative costs of sending an inmate to a community hospital versus a DPS facility for specific medical services. Further,</p> <ul style="list-style-type: none"> • CPHC's operating theaters are only in use four days per week for general anesthesia procedures, and • outside providers contend many emergency room visits from Raleigh-area inmates could be handled by CPHC's urgent care facility. 	Intended to reduce community hospital expenses by at least 30% and decrease need for outside services	No
Utilization Review	Central DPS Health Services staff review requests from in-house providers to determine if an inmate can receive non-emergency services from an outside provider through a pre-approval process.	Central DPS staff approve more than 88% of all requests annually but only 25% are processed within the timeframe required by policy.	Intended, no estimate	No

Source: Program Evaluation Division based on interviews and data provided by DPS.

DPS Health Services lacks sufficient staff to collect, monitor, and analyze expenditure and performance data, limiting the State's ability to ensure expenditures are efficient and effective. Large amounts of information are collected on inmate healthcare, particularly through DPS Health Services's electronic medical record and DPS's offender management software systems. Even with these systems in place, DPS Health Services does not attempt to identify how much can be saved by its efforts to contain costs. During interviews, central DPS Health Services staff stated that much of the information necessary for such projections is being collected, but the division does not have a designated central office employee assigned to compile and analyze it. The sections below discuss examples of missed opportunities for potential cost savings because DPS Health Services lacks data collections and analysis staff.

- **Example 1: Decision to send inmates to local emergency rooms.** Outside emergency room visits by inmates are costly to the State, both because custody staff must leave their assigned work station within a prison and because the State must reimburse the outside facility for the emergency service itself. Most prisons do not have around-the-clock healthcare services staff; in non-life-threatening events, custody staff are trained to follow a triage system that involves contacting health services staff on call at other prison facilities prior to making a determination to send an inmate to an outside hospital.

Without records of these requests, the Program Evaluation Division could not independently verify compliance with this policy, which is intended to save the State money by avoiding unnecessary high-cost emergency room visits. If custody staff are not following the triage process, they are more likely to call local emergency services for an ambulance to transport an inmate to a local hospital facility.

It does not appear that central DPS Health Services analyzes the frequency with which individual prisons send inmates to the emergency room. The Program Evaluation Division conducted this analysis, which shows that more than one-third of the State's prisons (20 prisons) sent at least 15% of their inmate populations to an emergency room at least once in Fiscal Year 2016–17. Analysis further shows that 10 prisons sent more than 20% of their prison population to the emergency room during this same fiscal year. These frequencies may indicate non-compliance with policy and unnecessary visits to emergency rooms.

Because DPS Health Services has not analyzed the cost driver of hospital emergency room visits by prison, the division would not be aware that

- eight prisons have more than doubled their number of prisoners sent to emergency rooms compared to five years ago;
- 13% of the prison population went to the emergency room during the last fiscal year, a greater than 10% increase from five years ago; and
- the total number of hospital visits by inmates across the state has increased by 56% during this five-year period, from 5,575 to 8,720 visits.

Such data collection and analysis would allow DPS Health Services to identify specific prisons that might be sending inmates to outside emergency rooms for services that, according to a Raleigh-area provider interviewed and queried by the Program Evaluation Division, could be provided by an urgent care facility.

- **Example 2: Supply inventory management.** Prison facilities across the state maintain inventories of medical supplies that vary according to each facility's characteristics and needs. For example, prisons with around-the-clock health services staff maintain more

varieties and quantities of supplies than prisons with less staff coverage.

Maintaining proper inventory levels is important as it prevents potential losses due to over-purchasing or expiration. DPS Health Services has not conducted analysis on this cost driver; had such analysis been performed, staff would have noted these costs have increased by 65% (\$1.4 million) since Fiscal Year 2014–15.

During site visits, the Program Evaluation Division observed variations in the methods that health services staff use to maintain medical supply inventories at prisons. Although staff at some facilities state that they track supply usage, staff at other facilities told the Program Evaluation Division they determine which supplies to order by “eyeballing” or “knowing when” items need to be replaced. For example, staff responsible for inventory at the Central Prison Healthcare Complex stated that they do not know the amount of supplies on hand.¹⁴

Finding 2. The Department of Public Safety’s Health Services division is partially funded through a structural deficit, and its aggregated budgeting method limits accountability of inmate healthcare services.

To summarize the finding below, the Department of Public Safety’s Health Services division (DPS Health Services) consistently exceeds its annual state appropriation and must rely on lapsed salary funds from other units within the department to fully fund operations. Additionally, DPS Health Services’s method of budgeting does not facilitate prison-specific analysis of expenditures; data that is available by prison does not always accurately reflect actual health services expenditures.

State agencies use budget fund codes for budgeting and accounting purposes; these codes are intended to show the resources and expenditures of a program or division. Although DPS Health Services is organized into seven units, it receives appropriations for and accounts for expenditures according to four budget fund codes. Exhibit 8 shows the individual budget fund codes and examples of their respective expenditures.

¹⁴ In a subsequent site inspection, Central Prison Healthcare Complex staff stated they are beginning to track inventory levels through an electronic spreadsheet.

Exhibit 8

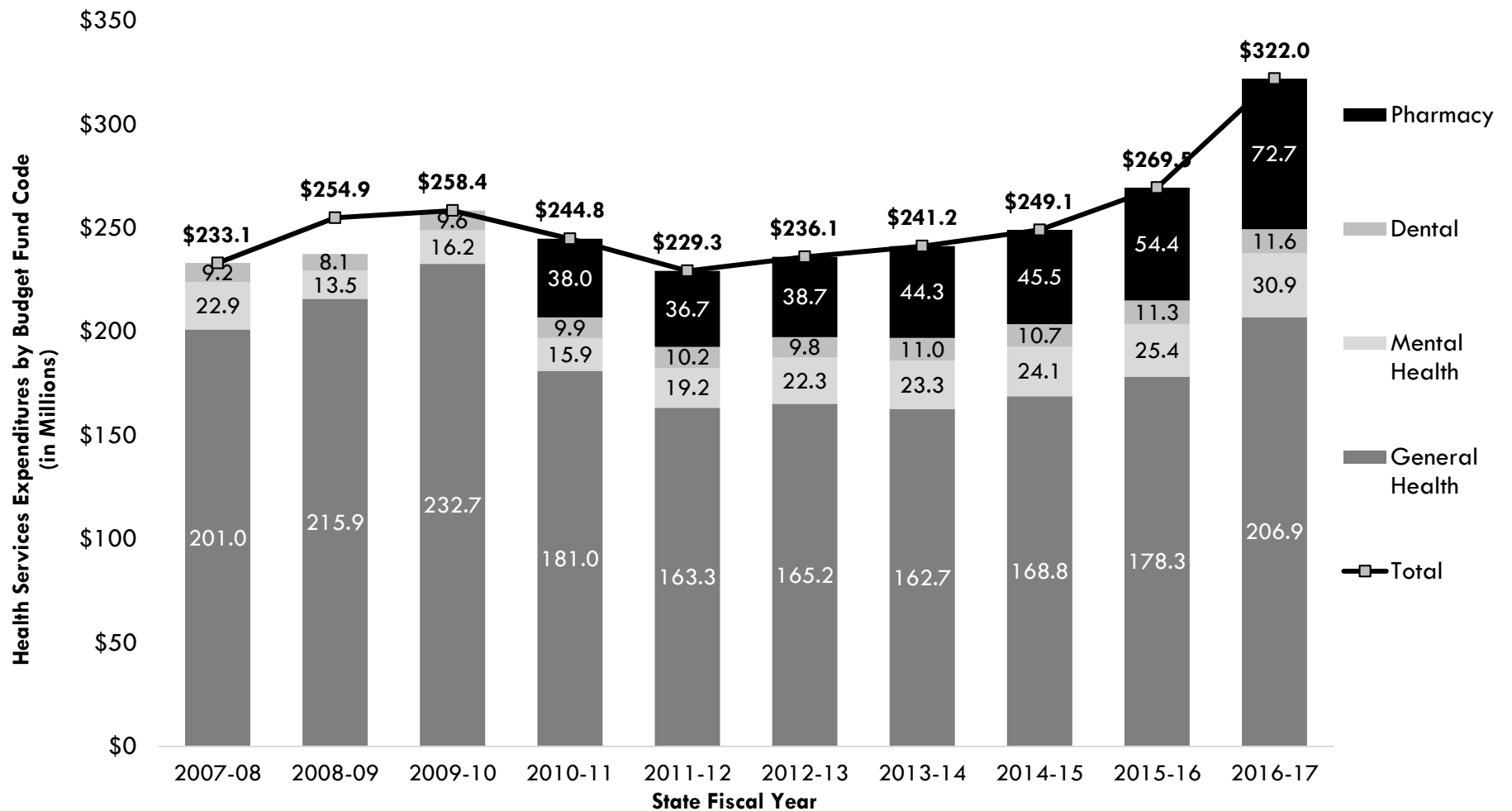
DPS Health Services Expenditures Are Primarily Made Across Four Budget Fund Codes

Budget Fund Code Number	Budget Fund Code	Example Expenditures
1331	General Health	Salaries for providers and nurses and outside medical services
1332	Mental Health	Salaries for psychiatrists, psychologists, and social workers
1333	Dental	Salaries for dentists and dental hygienists
1334	Pharmacy	Salaries for pharmacists, medications, and supplies

Source: Program Evaluation Division based on data provided by DPS and the North Carolina Accounting System.

Exhibit 9 shows the proportional distribution of inmate healthcare expenditures across the four budget fund codes, which, as previously discussed, increased by a total of \$89 million (38%) during the past decade, from \$233 million in Fiscal Year 2007–08 to \$322 million in Fiscal Year 2016–17. The largest increase in expenditures during the last five years has been for General Health, which increased by \$41.7 million (25%) from Fiscal Year 2012–13 to Fiscal Year 2016–17, followed by a \$33.9 million increase (88%) in Pharmacy expenditures. The second evaluation in this series focuses exclusively on inmate pharmacy expenditures.

Exhibit 9: Inmate Health Services Expenditures Have Increased by \$89 Million in the Last 10 Years

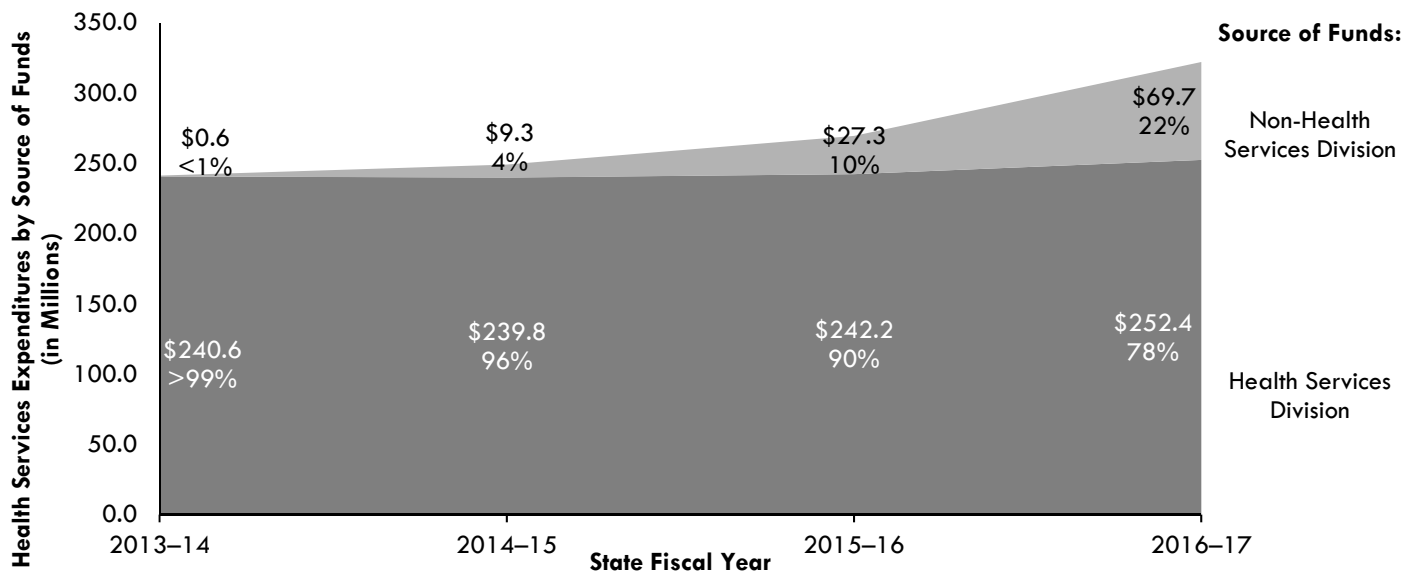


Notes: The decline in General Health Budget Fund Code expenditures in Fiscal Year 2010–11 reflects an accounting change; DPS Health Services did not begin using the Pharmacy Budget Fund Code until Fiscal Year 2011–12, prior to which pharmacy expenditures were included under the General Health Budget Fund Code. In Fiscal Year 2008–09, DPS Health Services received \$17.4 million in federal funds following the Great Recession to assist in funding staff positions; because these were one-time federal funds, they are not presented here as part of a budget fund code. Values for categories shown may not add up to total due to rounding.

Source: Program Evaluation Division based on data from the North Carolina Accounting System.

DPS Health Services consistently runs annual structural deficits that must be funded from elsewhere in the department. State appropriations to each of DPS Health Services’s four budget fund codes have not fully covered health services expenditures since Fiscal Year 2012–13. These gaps between revenues and expenditures result in annual structural deficits, and DPS fills these deficits with funds appropriated to other sections of the department. Exhibit 10 shows the DPS Health Services budget’s structural deficit for each of the last four fiscal years, which was highest during the most recently completed fiscal year at \$69.7 million.

Exhibit 10: Nearly a Quarter of Health Services Expenditures in Fiscal Year 2016–17 Were Funded from Non-Health Services Sources



Note: The percentage of DPS Health Services expenditures funded through structural deficit is calculated by dividing the amount of the structural deficit by DPS Health Services expenditures for the respective Fiscal Year.

Source: Program Evaluation Division based on financial data from the North Carolina Accounting System.

In Fiscal Year 2016–17, 22% of DPS Health Services expenditures were funded through lapsed salaries. Similar to other units in state government, DPS Health Services relies on lapsed salary funds from other sections in its department, such as funds available from vacant custody officer positions, to cover expenditures that exceed its appropriated budget.¹⁵ In the 2017 Appropriations Act, the General Assembly required the Office of State Budget and Management (OSBM) to report on the use of lapsed salary funds by state agencies, including DPS.¹⁶ In addition, the Act specifically required DPS to report twice annually to the Joint Legislative Oversight Committee on Justice and Public Safety and various appropriations committees on the department’s use of lapsed salary funds. However, no action has yet been taken to eliminate this structural deficit that has persisted for several years.

¹⁵ According to the Office of State Budget and Management, lapsed salaries refer to the dollar amounts not expended for salary and associated benefits (social security, retirement, longevity, and medical insurance contributions) during the period in which a position is vacant. Agencies receive these funds and can use them for purposes other than the position.

¹⁶ N.C. Sess. Law 2017-57, Sections 6.12(a) and 6.12(b).

According to OSBM, lapsed salary funds are to be used for one-time, non-recurring expenditures. Although DPS Health Services expenditures are technically one-time expenditures within an individual fiscal year, lapsed salaries are used for similar purposes year after year. Further, reliance on millions of dollars of lapsed salary funds from other DPS sections, over which DPS Health Services has no control, to support operations represents a less-than-ideal budgeting practice and introduces concerns regarding the department's ability to sustain services should vacant positions be filled and these lapsed salary funds become unavailable.¹⁷

DPS only reports information on health services expenditures made according to the four codes, which fails to fully reflect the actual costs of inmate healthcare. Although DPS Health Services spending primarily comes out of four budget fund codes, expenditures for some health services activities are recorded within other budget fund codes. For example, the Program Evaluation Division identified at least nine non-vacant positions with salaries totaling \$428,706 within DPS Health Services whose expenditures did not correspond to one of the four budget fund codes. DPS Health Services staff confirmed these positions should be funded from the code for General Health. It is unclear to what extent other inmate healthcare expenditures are reflected in other budget fund codes not directly associated with DPS Health Services and therefore are not reflected in the total reported costs of inmate healthcare.

In addition, DPS Health Services's method of budgeting and accounting does not show actual costs associated with expenditures for specific functions or categories. For example, the Pharmacy budget fund code would appear to include all expenditures by prisons on medications and medical supplies. However, in reviewing financial statements, the Program Evaluation Division discovered pharmaceuticals and supplies are sometimes paid for from the General Health budget fund code. Thus, simply using the total from the Pharmacy code to represent the full cost of pharmaceuticals is inaccurate because it is lower than the amount actually spent on pharmacy products and services.

Further, the four budget fund codes do not provide complete information on expenditures for related services. Using budget fund codes promotes some delineation of the purposes of expenditures but does not facilitate detailed analysis of factors driving costs. For example, expenditures from the General Health code can include the salaries of in-house contracted providers and nurses as well as expenditures for inmate hospital visits and in-prison visits from contracted healthcare staff. Even within the subcategory of expenditures for contracted services by one provider, DPS cannot easily identify how much was spent on contracted in-house providers versus hospital visits.

¹⁷ A 2017 National Institute of Corrections report identified a custody staffing vacancy rate of approximately 25% at Pasquotank Correctional Institution as contributing to a violent incident that resulted in four DPS staff deaths. The report further recommended an independent system-wide comprehensive staffing analysis. DPS staff stated that due to staff vacancies, the inmate population at this facility had already been reduced by approximately 20% prior to the above-mentioned incident.

Health services financial data is available by prison but lacks important information necessary to identify prison-specific cost drivers.

Currently, the primary financial data DPS Health Services collects on a per-prison basis are expenditures for prison healthcare staff salaries. However, many other expenditures for health services are not tracked in a prison-specific manner. For example, DPS Health Services pays contracted providers through agreements with provider agencies at a macro level across all of the State's prisons. There is little to no systematic information within financial records to delineate which prisons are using contract providers, the frequency with which they are being used, or the costs. Without reliable financial information for analysis at the individual prison level, DPS lacks the ability to identify potential under- or over-usage of contracted staff.

Further, financial information on health services activities conducted within prisons does not always accurately identify the populations receiving such services.

Each prison throughout the State has at least one medical mission, which defines the highest level of care that health services staff within the prison can provide. In addition, each facility may have one or more custody mission(s), such as minimum, medium, or close. Each prison facility can also have other missions or specific functions such as serving as a processing center for the intake of inmates before placement in their home prison facility or serving as a facility responsible for housing specific types of inmates, such as those who temporarily stay within a prison because of a parole violation. These latter facilities are known as Confinement in Response to Violation (CRV) units.

During site inspections and through a review of accounting documents, the Program Evaluation Division staff found that one CRV unit had medical costs such as nursing salaries and supplies that were not reflected in its budget but were instead reflected in an adjacent prison facility's budget. Program Evaluation Division staff found seven nursing staff positions serve this particular CRV unit. In other words, expenditure information for at least one of the State's CRV units does not fully reflect the total costs of the program. Furthermore, accounting for the health services staff serving the CRV unit within an adjacent prison's budget inflates the reported costs of health services within that prison.

Finding 3. Statutory and contractual payment arrangements for outside inmate healthcare services are more generous for providers in North Carolina than in several other states; modifying terms could save the State \$4.1 million annually.

To summarize the finding below, the State's statutorily required Medicaid reimbursement rate for community providers is double the rate used by several other states and represents an opportunity for annual cost savings of at least \$2.6 million. Further, the State's contracts with two hospital providers specify reimbursement at rates that exceed those established in statute. Reducing these two systems' reimbursement rates to current statutory rates would maintain an incentive already favorable to the providers and could additionally save the State approximately \$1.5

million annually. Finally, DPS is statutorily allowed to audit outside providers to ensure payments are made based on actual prevailing charges but chooses not to exercise this authority, leaving the State at risk for overpayment.

When inmates need medical attention that exceeds the capabilities of DPS Health Services staff and/or facilities—either for scheduled or emergency needs—they are referred to community healthcare providers. Scheduled community encounters are approved through a utilization review process performed by DPS Health Services central office staff. Emergency services do not follow the utilization review process; instead, prison custody or healthcare staff determine when an inmate’s immediate needs warrant an emergency room visit.

DPS pays community providers directly for their services according to a formula established in statute.¹⁸ There are two methods for reimbursing outside providers for services they provide to inmates:

- through the State’s Medicaid program when inmates are determined to be Medicaid-eligible, or
- through DPS reimbursing providers directly when inmates are not Medicaid-eligible.

For payments made directly to providers, state law attempts to contain the costs of services by specifying provider reimbursement rates. As discussed in the Background, state law requires DPS to reimburse providers for services provided to non-Medicaid-eligible inmates at a rate of the lesser of

- 70% of the provider’s then-current prevailing charges or
- two times (200%) the then-current Medicaid rate.

State law requires DPS to reimburse providers accordingly unless DPS contracts with a provider for services at rates that

- provide greater documentable cost avoidance than statutory rates or
- are less favorable to the State but ensure continued access to care.

During interviews, DPS Health Services staff said this latter provision assists in ensuring inmate access to facilities for services that exceed the capabilities of the Central Prison Healthcare Complex. Further, statute requires DPS to make reasonable efforts to use hospitals or providers with which it contracts and to equitably distribute inmates among community hospitals and other facilities. As of June 30, 2017, 12 entities held contracts with DPS for providing off-site inmate healthcare services, many of which are health systems with multiple hospital and individual providers.

Current reimbursement rates for outside healthcare services are more generous than other states’ rates of reimbursement. In Fiscal Year 2016–17, DPS paid outside providers a total of \$18.5 million at the statutory rate (lower of 70% of billed charges or 200% of the then-prevailing Medicaid rate). The Program Evaluation Division’s review of

¹⁸ N.C. Gen Stat. § 143B-707.3(a).

other states' payment arrangements shows that several states do not reimburse providers at such a generous rate. Other states provide examples of reimbursement methodologies that attempt to contain costs and are more financially advantageous for the state.

- Four states (Connecticut, Texas, Washington, and West Virginia) reimburse community providers at 100% of the Medicaid rate rather than 200% as in North Carolina.
- Four states (Indiana, Louisiana, Oklahoma, and South Carolina) connect their provider reimbursements to Medicaid rates in other ways or to rates of reimbursement for their respective state employee plans.

Reducing North Carolina's Medicaid reimbursement rate for non-contracted outside services to reflect the practices of other states could save at least \$2.6 million annually. If North Carolina halved its reimbursement rate from 200% of the then-current Medicaid rate to the 100% rate used by the above-mentioned states, the State could likely save at least \$2.6 million annually.¹⁹ In the last five years, had providers in North Carolina been paid at 100% of the then-current Medicaid rate rather than 200%, annual savings to the State would have ranged from \$2.6 million (Fiscal Year 2016–17) to \$3.8 million (Fiscal Year 2014–15).

DPS Health Services's reporting to the General Assembly concerning outside provider contracts suggests these contracts save the State money, but 9 of 12 contracts stipulate providers are to be paid at the generous statutory rate. State law requires DPS to report quarterly to the General Assembly on a variety of items related to outside providers of health services, including a list of community providers, whether these providers are contracted or not, and the amounts paid to providers.²⁰ Members reviewing these reports might infer that contracted providers are paid at rates that are more financially favorable for the State. However, 9 of 12 contracts (75%) specify that providers be reimbursed at the same rates established in state law (at the lesser of 70% of billed charges or 200% of the Medicaid rate).²¹ Only one contract with an outside provider is more financially advantageous for the State.

Two of the 12 contracts (with UNC Hospitals and Vidant Health) establish reimbursement rates that are more financially advantageous for providers than state law specifies. DPS Health Services staff contend such contractual arrangements promote continued access to services for inmates within a hospital facility as well as upon their return to prison. As Exhibit 11 shows, DPS reimburses both UNC Hospitals and Vidant Health at Medicaid rates higher than those specified by law; further, the

¹⁹ This estimate is based only on claims data paid at the Medicaid rate and assumes providers were paid the corresponding amounts per service rate. It does not include claims data for providers paid at other contract-specific rates that are more advantageous to providers.

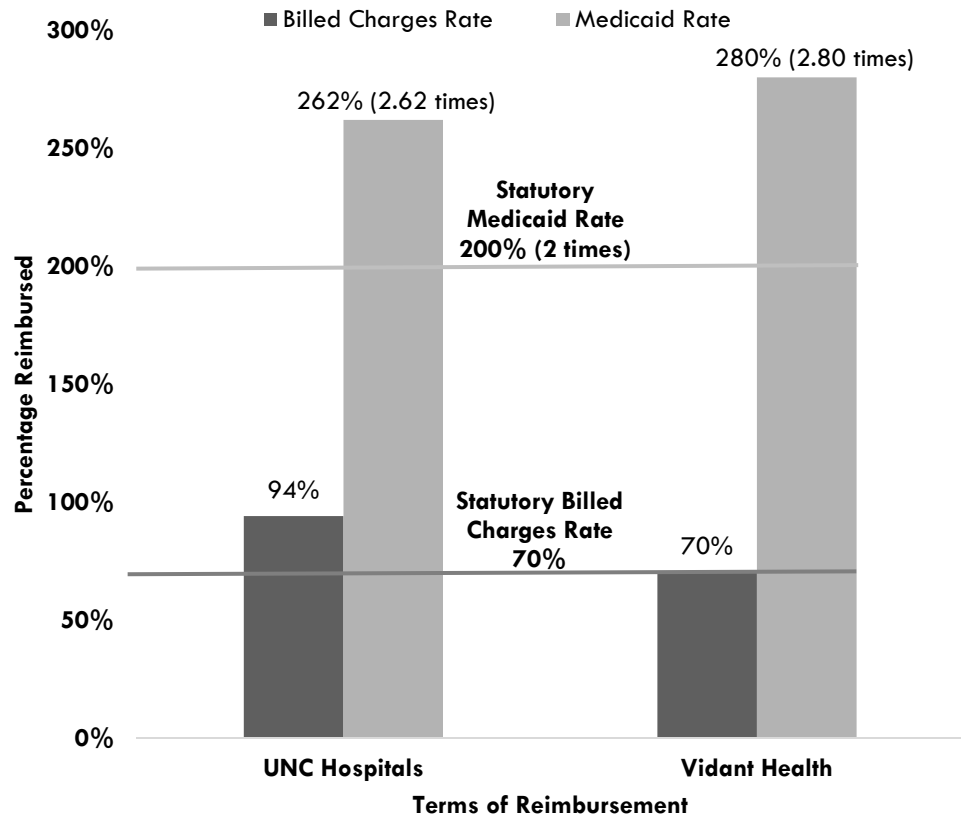
²⁰ N.C. Gen. Stat. § 143B-707.3.

²¹ These nine providers may seek a contractual relationship to avoid potential legal liability from a determination that they exceed their equitable distribution of services provided to inmates as outlined in statute. Only one contract allows a healthcare system to exceed its equitable distribution of services, but this system is already reimbursed at a rate higher than required by state law.

percentage of billed charges rate contractually established with UNC Hospitals is 94%, which is higher than the 70% rate set in statute.

Exhibit 11

Reimbursement Rates for Two Contracted Providers Exceeded Those Specified by State Law in Fiscal Year 2016–17



Notes: UNC Hospital’s contract stipulates payments at Medicaid rates based on the previous year’s Medicaid rate as of a specific date rather than the prevailing Medicaid rate as statute specifies.

Source: Program Evaluation Division based on a review of state law and data from DPS Health Services.

Together, these two providers with contractual terms more favorable than those outlined in statute received \$7.2 million in reimbursements from DPS Health Services in Fiscal Year 2016–17, representing 39% of all claims payments. DPS could not document any rationale or cost study to support such high rates of reimbursement, though DPS contends that contracts with these providers ensure continued access to services for inmates.

Reducing the reimbursement rates for these two healthcare systems could save approximately \$1.5 million annually. As discussed earlier, current statutory reimbursement rates exceed those of several other states. If UNC Hospitals and Vidant Health were reimbursed at the current statutory rates (the lesser of two times Medicaid’s rates or 70% of billed charges) rather than the more-generous rates currently stipulated in their contracts with DPS, the Program Evaluation Division estimates the State could likely save at least \$1.5 million annually based on claims data from Fiscal Year 2016–17. Exhibit 12 shows savings estimates had these two providers been reimbursed at the statutory rates for each of the last five fiscal years. The estimated savings range from \$1.3 million (Fiscal Year 2012–13) to \$2.7 million (Fiscal Year 2015–16). Realizing these savings

would depend on reducing both the percentage of billed charges rate (from 94% to 70%) and the Medicaid reimbursement rate (from 262% to 200%) paid by the State to UNC Hospitals as well as a reduction in the Medicaid reimbursement rate (from 282% to 200%) for Vidant Health.

Exhibit 12: Reducing Reimbursement Rates for Two Contracted Providers Could Save \$1.5 Million Annually

Area of Reimbursement Reduction	Provider	Estimated Savings by Fiscal Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
Percentage of Billed Charges	UNC Hospitals	\$ 369,729	\$ 433,988	\$ 659,311	\$ 460,232	\$ 364,209
Medicaid Reimbursement Factor	UNC Hospitals	597,765	539,712	594,224	1,024,745	696,126
	Vidant Health	337,429	504,231	996,490	1,177,918	430,223
Total		\$ 1,304,924	\$ 1,477,931	\$ 2,250,025	\$ 2,662,896	\$ 1,490,558

Notes: These estimates assume UNC Hospitals continues to be reimbursed at Medicaid rates effective on October 1 of the previous year rather than for the current Medicaid rates for day of service. Values for categories shown may not add up to total due to rounding.

Source: Program Evaluation Division based on claims information from DPS Health Services.

DPS’s decision not to exercise its statutory authority to examine charges billed by outside facilities presents risks to the State. State law grants DPS the authority to audit any given provider to determine actual prevailing charges to ensure compliance with the reimbursement rates specified in law.²² Additionally, most contracts between DPS and community providers explicitly give DPS the authority to conduct such audits. However, DPS has not exercised this authority.

When the Program Evaluation Division requested records of any existing audits, the DPS Controller’s staff said they do not perform audits of providers’ charges, further stating they believe audits could present legal challenges because of the proprietary nature of these charges. The Program Evaluation Division contends state law grants DPS this authority. Failure to audit hospital charges presents a financial risk to the State. If providers are aware that charges are not being audited, they may choose to bill DPS for services at rates that are higher than their prevailing rates.

Finding 4. DPS Health Services’s processes for inmate Medicaid enrollment lack oversight and controls and have failed to realize potential cost savings to the State of approximately \$136,000 per year. To summarize the finding below, North Carolina receives partial payment when Medicaid-eligible inmates receive inpatient services for 24 hours or more at community facilities. To qualify for Medicaid, inmates must receive 24 hours of service at an inpatient facility and meet other eligibility

²² N.C. Gen. Stat. § 143B-707.3(a).

criteria (such as being under 21, over 65, or disabled). However, the effectiveness of the pre-screening process DPS Health Services uses to determine whether to submit an application is likely limited by minimal Medicaid policy training as well as limited data collection and analysis of eligibility determinations. The Program Evaluation Division identified instances in which DPS Health Services social workers failed to submit Medicaid applications for inmates who would have likely qualified for Medicaid, potentially resulting in unnecessary state expenditures. DPS also has failed to pursue federal funds for Medicaid enrollment activities that could save the State approximately \$120,000 annually. Further, DPS Health Services has not used existing electronic means of submitting Medicaid applications to county departments of social services, resulting in additional unnecessary expenditures.

In 2004, the Centers for Medicare and Medicaid Services (CMS) issued guidance to states maintaining its policy that citizens who meet a state's Medicaid eligibility criteria may be enrolled in the program before, during, and after the time in which they are held in jail or prison. CMS encourages states to temporarily suspend an inmate's Medicaid coverage during incarceration, as suspension allows for eligibility to be reinstated as necessary (e.g. when receiving additional qualifying services while still incarcerated, upon release from prison).

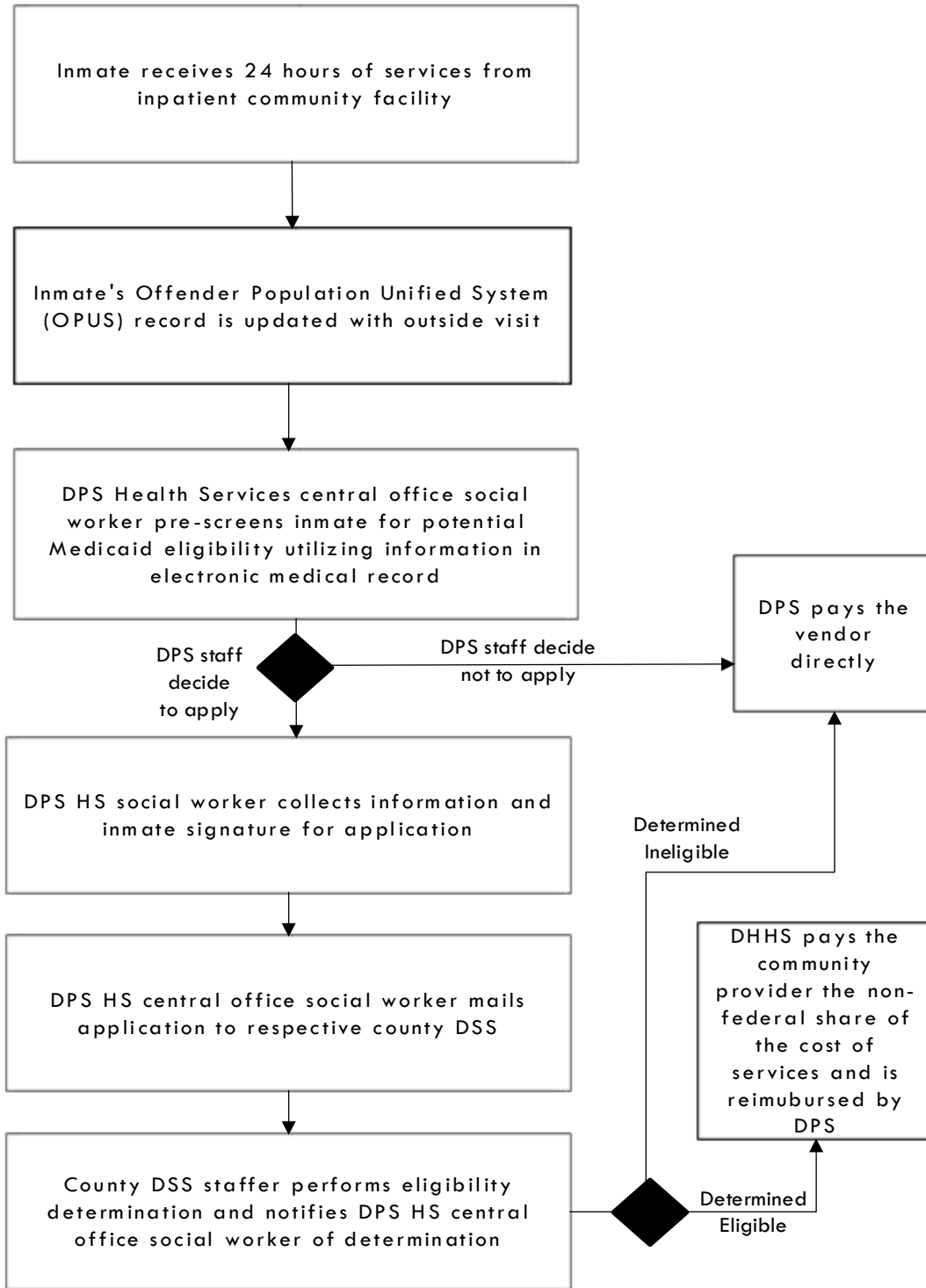
As stated in federal Medicaid policy, states are only responsible for up to 50% of the cost when a Medicaid-eligible inmate stays at a community hospital for 24 hours or longer. In 2010, the General Assembly began requiring the Department of Public Safety (DPS) to develop protocols for potentially eligible prisoners to access Medicaid for expenses incurred when they are hospitalized.²³

To implement this legislation, the Department of Health and Human Services (DHHS) and DPS entered into a Memorandum of Agreement to outline the processes both entities, as well as county departments of social services, would follow.²⁴ Within this Memorandum of Agreement, it was agreed that DPS would reimburse DHHS for the non-federal share of costs incurred, that DPS social workers would complete applications for inmates, and that these applications would be forwarded to the appropriate county department of social services. Exhibit 13 shows the general process DPS Health Services follows when considering whether to submit a Medicaid application for an inmate receiving outside services.

²³ N.C. Sess. Law 2010-31, Section 19.6(c).

²⁴ The Department of Corrections was the entity that signed the contract, but it was later merged into the Department of Public Safety.

Exhibit 13: Process for Deciding Whether to Submit a Medicaid Application for an Inmate



Note: The above process does not account for inmates who previously qualified for Medicaid.

Source: Program Evaluation Division based on data provided by DPS.

In 2013, the General Assembly enacted legislation requiring DPS to report quarterly on the volume of services provided to Medicaid-eligible inmates, associated costs, and estimated savings from paying the nonfederal portion of Medicaid.²⁵ Research by the Pew Charitable Trusts suggests that states that expand their Medicaid eligibility under the Affordable Care Act generally reap the largest savings as traditionally excluded populations become eligible for coverage. However, as Exhibit 14 shows, even as a non-Medicaid-expansion state, North Carolina has achieved savings through Medicaid enrollment. On average, the State saved \$11.3 million annually from Fiscal Year 2013–14 to Fiscal Year 2015–16 by enrolling inmates in Medicaid according to DPS Health Services estimates.²⁶ DPS estimates the State saved \$9 million by enrolling eligible inmates for Medicaid coverage in Fiscal Year 2016–17.²⁷

Exhibit 14

DPS Estimates Enrolling Inmates in Medicaid Has Saved the State \$43 Million Since Fiscal Year 2013–14

Fiscal Year	Estimated State Savings from Medicaid Enrollment
2013–14	\$11,799,995
2014–15	11,654,540
2015–16	10,563,632
2016–17	8,999,922
4-Year Total	\$43,018,089

Notes: Estimated Savings in Fiscal Year 2016–17 might be lower than previous years because of outstanding Medicaid eligibility determinations.

Source: Program Evaluation Division based on DPS reports submitted to the General Assembly and interviews with DPS Health Services staff.

DPS does not document staff decisions regarding whether or not to submit Medicaid applications. Medicaid applications for inmates differ from those for a non-incarcerated individual.²⁸ During interviews, DPS Health Services central office social workers said they determine whether to submit a Medicaid application for an inmate based on the inmate’s medical record and other information; however, the department does not document the rationale for choosing not to send an application when staff make this decision. Completed applications are sent to the inmate’s home county for processing by county department of social services staff. As a result, county social services workers process only those applications for inmates that central office DPS social workers decide to submit; in contrast, county social workers must process every application received from non-incarcerated citizens.

²⁵ N.C. Sess. Law 2013-360, Section 16C.4(c) and N.C. Gen. Stat. § 143B-707.3(c)(5).

²⁶ The annual average amount saved is based on Fiscal Years 2013–14 to 2015–16 because the most recently completed fiscal year might not include all savings due to outstanding Medicaid eligibility determinations.

²⁷ In 2012, the Office of the State Auditor conducted a review of DPS’s method of estimating savings associated with inmate Medicaid enrollment and determined the method was reasonable.

²⁸ A description of the Medicaid eligibility process for non-incarcerated citizens can be found in a previous Program Evaluation Division report. Program Evaluation Division. (2016, April). Timeliness of Medicaid Eligibility Determinations Declined Due to Challenges Imposed by NC FAST and Affordable Care Act Implementation. Report to the 2016 Regular Session of the 2015 General Assembly. Raleigh, NC: General Assembly.

In making determinations of whether or not to submit Medicaid applications for inmates, DPS is violating one of the guiding principles set forth in its Memorandum of Agreement with DHHS. The agreement contains a guiding principle that “DPS should be complet[ing] a Medicaid application on all inmates who have an inpatient hospital stay.” DPS Health Services social workers are violating this principle because they only complete and submit Medicaid applications for inmates they believe are likely to be deemed Medicaid-eligible. In Fiscal Year 2016–17, central DPS Health Services social workers completed and submitted applications for approximately 42% of all hospital admissions with 24-hour stays; the Memorandum of Agreement that DPS reached with DHHS directs DPS Health Services to submit applications for 100% of qualifying admissions.

Minimal policy training and limited data collection and analysis inhibit the effectiveness of the pre-screening process for inmate Medicaid application submissions.

- **Minimal policy training.** Staff receive a notification from the Offender Population Unified System (OPUS) system when an inmate receives outside health services for 24 hours or more. Upon this notification, the pre-screening process begins. However, it is unclear how well central DPS Health Services social workers understand Medicaid eligibility criteria considering they do not receive formal policy training from DHHS. County DSS staff said this training is essential to ensuring accurate Medicaid eligibility determinations. A lack of training may result in a failure to submit applications for inmates who are potentially Medicaid-eligible or in applications being denied.
- **Limited data collection and analysis.** Information on Medicaid-related activities performed by DPS Health Services social workers is collected in two places:
 - a spreadsheet listing information about each application submitted and the corresponding determination made by a county DSS; and
 - within OPUS, which identifies an inmate as eligible or ineligible for Medicaid.

DPS social workers do not document systematic information on pre-screening decision making, such as a decision not to submit an application because the worker believed the inmate’s financial assets exceeded what is allowable by Medicaid policy. As a result, inmates recorded as ineligible in OPUS include those who received that designation because social workers decided not to submit an application as well as those whose applications were denied by a county DSS. In other words, some inmates identified as ineligible for Medicaid in OPUS may indeed have been eligible, but an application was not submitted.

Neither data source contains the information necessary to determine the effectiveness of the pre-screening process. Although DPS Health Services staff stated they do conduct reviews of the effectiveness of the pre-screening process, the data limitations of both OPUS and the spreadsheet

would prohibit a valid and systematic examination of the effectiveness of this process as neither provides a means for social workers to indicate reasons for not submitting a Medicaid application. Further, it does not appear DPS Health Services or any outside entity regularly reviews this process by obtaining Medicaid application determination data.

A lack of oversight of DPS's Medicaid eligibility activities and inadequate controls for selecting applicants may have resulted in unnecessary expenditures of at least \$68,989 during the last five years. Oversight of the Medicaid pre-screening process is important because the State cannot receive federal funds for inmates for whom Medicaid applications were not submitted. Interviews with central DPS Health Services staff report little to no oversight of Medicaid staff activities and no coordination with DHHS.

The Program Evaluation Division conducted analysis of records for inmates meeting the criteria for potential Medicaid reimbursement (24-hour inpatient stay) for whom central DPS Health Services social workers decided not to submit a Medicaid application but who likely would meet general eligibility criteria based on their age. During the last five years, the Program Evaluation Division estimates central DPS Health Services social workers did not submit applications for 192 inmates who would have been eligible simply by meeting the age criterion (younger than 21 or 65 or older). This failure to submit Medicaid applications for inmates meeting one of the most fundamental Medicaid eligibility criteria may mean the State unnecessarily paid more than the non-federal share for these hospital visits. Because central DPS Health Services staff do not collect information on the justification for their decisions not to submit applications, the Program Evaluation Division is unable to determine if these inmates would have failed to meet other eligibility criteria.

The State could save approximately \$120,000 annually by participating in federal Medicaid administration cost-sharing for the work of central DPS Health Services social workers. Federal regulations provide for reimbursement of at least 50% of staff time related to Medicaid eligibility determination activities conducted by state personnel, county DSS staff, and other qualifying entities.²⁹ At least one non-DHHS state agency (the Department of Public Instruction) receives federal reimbursement for staff time spent pursuing Medicaid eligibility for a specific clientele. In Fiscal Year 2016–17, four full-time equivalent central DPS Health Services social workers performed administrative activities related to inmate Medicaid eligibility (i.e., completing Medicaid applications and gathering required supporting documentation), with salary expenditures from state appropriations totaling \$214,072.³⁰

During interviews, DHHS officials stated they do not foresee any reason that central DPS Health Services social workers would not qualify for federal administrative funds, which the Program Evaluation Division estimates could have saved approximately \$107,036 during the most

²⁹ Qualifying activities include, but are not limited to, completing Medicaid applications on an inmate's behalf or assisting in gathering documents required to complete a Medicaid application.

³⁰ Salary figures exclude any state-provided benefits.

recent fiscal year. Further, the Program Evaluation Division estimates that if DPS Health Services had sought federal funds for social workers within prisons performing Medicaid eligibility activities, the State could additionally have saved approximately \$12,000 last year.

DPS unnecessarily spends \$2,129 annually by not using current electronic methods to send inmate Medicaid applications to county departments of social services (county DSSs). Since 2014, county DSSs have had the legal authority to receive applications electronically, saving mailing costs as well as allowing the eligibility determination process to begin sooner. However, central DPS staff have chosen not to use this lower-cost method of application submission.³¹ DPS social workers use either U.S. mail or a courier service to send Medicaid applications and supporting documentation to county DSSs for eligibility determinations. During interviews with one county DSS office, Program Evaluation Division staff observed that DPS Health Services had spent \$10 to ship a single application to the county DSS.

Furthermore, the Program Evaluation Division informed central DPS Health Services social workers that a DHHS web-based portal, Electronic Pre-Assessment Screening Service (ePass), will soon have functionality allowing for the electronic uploading of Medicaid application documents. During interviews, central DPS Health Services social workers said they were not aware of this forthcoming innovation, further indicating a lack of coordination with DHHS. The Program Evaluation Division estimates using either of these two electronic methods could save the State \$2,129 annually.

Finding 5. Prison locations and work environments contribute to chronic vacancies in the inmate healthcare workforce, resulting in the use of more expensive contract staff that cost \$25 million in Fiscal Year 2016–17.

To summarize the finding below, the work environment and geographic locations of prisons present challenges in recruiting and retaining staff to provide inmate healthcare. As of June 2017, among a total workforce of 2,167 positions, DPS Health Services had 419 vacancies, many of which were medical personnel positions vacant for a year or longer. DPS Health Services has taken several actions to reduce these vacancies but has not measured the effectiveness of these efforts. These vacancies lead DPS Health Services to rely on outside contract staff to provide inmate health services within prisons, which cost \$25 million in Fiscal Year 2016–17. Reliance on these higher-cost contract staff also create disincentives in filling vacancies.

Corrections environments are inherently challenging for recruiting and retaining qualified health services staff. The sections below discuss the most commonly cited challenges.

³¹ Although county DSSs report DHHS officials might desire an original copy of certain disability application documents, policy holds that signed copies of these forms are sufficient and acceptable.

- **Prison environment.** Qualified individuals may first seek employment in other healthcare facilities as opposed to prison facilities largely because of the nature of the clients and risks associated with a correctional environment. The possibility of exposure to violent incidents resulting in harm to prison staff hinders recruitment.
- **Location of prisons.** North Carolina has 57 prisons, many of which are located in geographically-remote places. The locations of the State's prisons present recruitment and retention challenges for two primary reasons. First, some health services staff may desire to reside in areas that are more urban than the locations of most North Carolina prisons and thus would need to commute long distances to work in a prison.

Second, there are fewer health professionals in rural areas. For instance, in Alexander County, there is only one primary care doctor for every 5,330 people. The state average is one primary care doctor for every 1,420 individuals. The county also has a low number of nurses, nurse practitioners, and mental health professionals compared to other parts of the state. It is not surprising then that health services staff vacancies in Alexander County are greater than 30%. In North Carolina as a whole, there are 79 counties designated as Health Professional Shortage Areas for one or more types of providers. This scarcity of health care professionals in rural areas affects recruitment and retention at all types of medical facilities and is not limited to prisons.

The Program Evaluation Division explored the relationship between a prison's geographic location and its vacancy rate. As Exhibit 15 shows, 13 counties had vacancies for more than 20% of their prison health services positions. Of these 13 counties, 11 are rural counties and two are suburban counties, according to Rural Center classifications. Appendix C shows the vacancy rates for all counties with prisons.

Exhibit 15

Prison Health Services Staff
Vacancy Rates in 13
Counties Exceed 20%

Health Services Staff Vacancy Rates	Number of Counties	Counties
0%	18	Caswell, Catawba, Davidson, Duplin, Edgecombe, Forsyth, Franklin, Gaston, Hyde, Lee, Lincoln, Northampton, Pitt, Rutherford, Sampson, Stanly, Union, Wilkes
1 to 5%	1	Montgomery
6 to 10%	7	Buncombe, Caldwell, Hoke, McDowell, New Hanover, Pender, Randolph
11 to 15%	6	Avery, Craven, Halifax, Harnett, Richmond, Tyrrell
16 to 20%	7	Burke, Johnston, Robeson, Rowan, Scotland, Wake, Warren
21% or more	13	Alexander, Anson, Bertie, Cabarrus, Carteret, Columbus, Granville, Greene, Nash, Orange, Pamlico, Pasquotank, Wayne

Note: Positions reported as vacant are as of June 30, 2017. Locations are reported in BEACON and include all prisons within a county. Although there are no prisons within Duplin, Edgecombe, or Stanly counties, positions are recorded in BEACON for these counties, and data from each of these counties show a 0% vacancy rate

Source: Program Evaluation Division based on BEACON data provided by the Office of the State Controller and data provided by DPS.

Of the 18 counties with a 0% vacancy rate, seven are in the Mountain region (see Exhibit 2). Further, the Mountain region has the second-fewest number of counties with vacancy rates of 21% or higher among the four regions, ranking behind only the Central region. These lower vacancy rates could be attributable to several factors specific to the region, including

- use of highly desirable nursing schedules,
- more minimum-custody prison facilities, and
- fewer large hospitals surrounding prison facilities.³²

Further, Mountain regional health services staff employ additional practices which they believe contribute to better staff retention and which the Program Evaluation Division observed during site inspections. For example, to assist in retention efforts, Mountain regional health services staff offer

- frequent staff newsletters,
- employee recognition programs,
- prison recognition programs for adherence to performance standards, and
- staff appreciation lunches at personal expense.

³² According to DPS Health Services staff, these highly desirable schedules have nurses working Monday through Friday with all weekends and holidays off.

Prison staff who receive such benefits said they promote a sense of pride within their respective prisons and promote friendly competition with other prisons within the region along several performance measures. DPS Health Services staff stated these retention techniques are not employed systematically across the other three regions.

- **Competition with other health services providers.** North Carolina has local public health departments, private practice facilities, federally-owned hospital facilities, state-owned behavioral health facilities, and private hospital facilities, all of which compete with prisons for health services staff. During interviews, a commonly cited competitor for prison nursing staff was the U.S. Department of Veterans Affairs, which is perceived as a more comfortable work environment with higher earning potential.

DPS Health Services staff also stated that the timeframes for hiring staff are longer than those of private entities because of the necessary involvement of various state officials within and beyond the division. According to DPS Health Services's official hiring process, if a potential employee engages in salary negotiations with DPS Health Services staff, as many as 53 days can pass between the closing date of a position and the date the employee is contacted to schedule a start date.³³ However, DPS Health Services staff state that the hiring process sometimes exceeds these timeframes. Staff said potential employees are typically looking to assume a new position in a much shorter timeframe; if potential employees have applied to multiple entities, they are likely to receive other offers and begin work much sooner elsewhere.

As a result of these and other recruitment and retention challenges, DPS Health Services had 419 vacancies out of 2,167 total positions as of June 30, 2017. As Exhibit 16 shows, a total of 419 DPS Health Services positions across all categories of expenditures were vacant as of June 30, 2017. Of these vacancies, most were in the General Health classification (61%).

³³ This calculation accounts for giving the standard two-week notice when scheduling a start date.

Exhibit 16: Approximately 19% of All DPS Health Services Positions Were Vacant as of June 2017

Service Area Classification	Example Positions	Total Vacant Positions	Total Positions	Percentage of Total Positions that Are Vacant	Percentage of 419 Vacant Positions
General Health	Providers, nurses, and medical records staff	255	1,437	18%	61%
Mental Health	Psychiatrists, psychologists, nurses, providers, and social workers	148	529	28%	35%
Dental Health	Dentists and dental hygienists	12	115	10%	3%
Pharmacy	Pharmacists and pharmacy technicians	4	88	5%	1%
Total		419	2,167	19%	100%

Note: Positions reported as vacant are as of June 30, 2017.

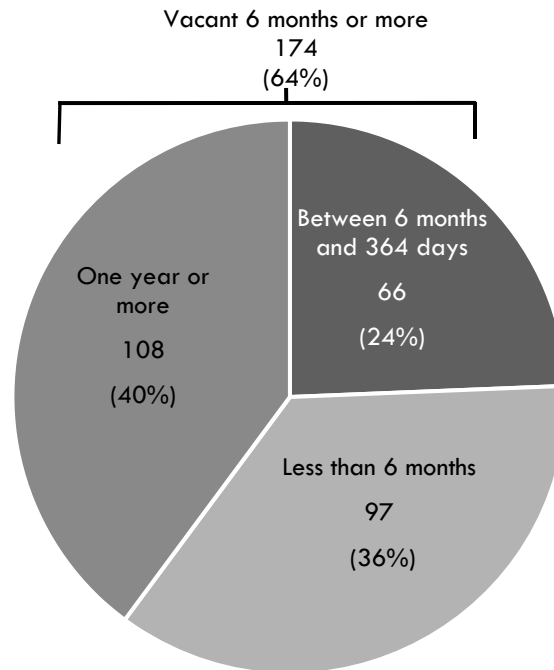
Source: Program Evaluation Division based on BEACON data provided by the Office of the State Controller and data provided by DPS.

Across all categories of expenditures, 271 of the 419 vacant positions (65%) were medical personnel.³⁴ Many of these medical positions have been vacant for extended periods of time. As Exhibit 17 shows, 174 of the 271 vacancies (64%) were vacant for six months or longer as of June 2017, and 108 were vacant for a year or longer.

³⁴ Although 61% of the 419 total vacancies were positions paid through the General Health budgeting area, this percentage does not account for staff providing medical services whose salaries are billed to other expenditure categories. For example, nurses may be assigned to specific mental health units and their salaries would accordingly be reflected under Mental Health expenditures rather than General Health expenditures.

Exhibit 17

Nearly Two-Thirds (64%) of Vacant Medical Positions Have Been Vacant for Six Months or More



Note: Only contracts in effect as of June 30, 2017 are included.

Source: Program Evaluation Division based data from DPS Health Services.

In response to high vacancy rates, both the General Assembly and DPS Health Services have begun efforts to reduce the number of open positions. The following sections discuss several of DPS Health Services's primary efforts to recruit and retain health services staff.³⁵

- **Post-secondary partnerships.** DPS Health Services partners with colleges and universities within the state to introduce health services students to the correctional environment in hopes of convincing them to work in inmate healthcare upon graduation and licensure. In some cases, students can earn course credits for their work as well as provide DPS Health Services with needed assistance.
- **Elimination of experience requirement for graduating nurses.** DPS has recently revised its requirements for hiring nurses. Until 2017, DPS Health Services could only offer employment to nurses who had accumulated two years of experience following graduation and licensure. Through its work with DPS Human Resources staff and the Office of State Human Resources, DPS Health Services can now offer positions to graduating nursing students who would begin work in a prison immediately upon licensure.³⁶
- **Work schedule adjustments.** DPS Health Services allows certain staff and particular prisons to adopt work schedules that facilitate

³⁵ In addition to the efforts discussed in this section, DPS Health Services has developed an onboarding program for nurse recruits and nurse leadership and has cultivated relationships with 44 different nursing programs.

³⁶ Although the experience requirement has been eliminated, the hiring preference is for nurses with one year or more of experience.

better work-life balance, such as working three- or four-day work weeks in rotation with other staff. During site visits, several prison healthcare staff said such schedules are a desirable benefit.

- **Hiring of four recruiters.** In late 2017, DPS announced plans to hire four recruiters to focus exclusively on staffing prison health services vacancies. These four positions are administratively housed within the DPS Human Resources office and each serves a specific region of the state.
- **Providing employees with state-owned vehicles.** DPS Health Services has provided some staff with state-owned vehicles for commuting from a duty station to a prison. Although some instances appear to violate DPS policy because an employee's assigned workstation is not based on his or her main location of work, allowing staff to use state vehicles represents a benefit for employees working in hard-to-staff prisons. Appendix D further discusses the use of state-owned vehicles by DPS Health Services staff.

DPS does not collect any data to measure the effectiveness of these efforts.

Recognizing the significant challenges in recruiting prison health services staff, particularly nurses, the General Assembly required DPS to report to the Joint Legislative Oversight Committee on Justice and Public Safety by December 1, 2017 on nurse vacancies and other relevant information.³⁷ The report discusses many of the above-mentioned efforts and proposes a number of additional efforts to recruit and retain nurses:

- differentiating pay based on shift times,
- offering sign-on and retention bonuses, or
- establishing an employee referral program.

The report notes that proposed efforts would require further study and fiscal analysis to determine the necessity of additional funding; however, there is no discussion of how DPS would measure the effectiveness of these efforts or estimates of what the State could save from implementing these efforts.

The report also does not establish a target vacancy benchmark standard (such as reducing nursing vacancies by 5% within a year) that one or all efforts combined might be expected to achieve. In any event, current recruitment and retention efforts are clearly insufficient as DPS Health Services continues to operate with high vacancy rates.

High vacancy rates lead to a reliance on higher-cost contracted healthcare staff. Despite staff vacancies, DPS Health Services must still ensure inmates receive proper healthcare. In the absence of sufficient numbers of state employees to fulfill these duties, two groups of contract staff perform health services functions within prisons. First, some contracted temporary employees are hired through the Office of State Human Resources's Temporary Solutions program; each staff member hired through Temporary Solutions is individually contracted to work for no

³⁷ N.C. Sess. Law 2017-57, Sections 16C.11B(a) and 16C.11B(b).

more than 11 consecutive months for DPS Health Services. Second, DPS Health Services may contract with private staffing agencies to meet healthcare service needs.

DPS Health Services staff believe there are several benefits to employing state employees as opposed to contract staff, including:

- knowledge of, greater training on, and higher adherence to DPS Health Services policies and procedures due to in-house accountability mechanisms;
- knowledge of the prison system, its component divisions and units, and relationships among such units;
- knowledge of methods to procure necessary supplies in accordance with policy in order to obtain efficiencies; and
- investment in the prison system and DPS Health Services and their corresponding goals.

In Fiscal Year 2016–17, DPS Health Services spent \$25 million on contract medical personnel within prisons. Seven agencies for providers and psychiatrists and nine agencies for nurses provide contract inmate medical services. In Fiscal Year 2016–17, DPS Health Services spent \$7.6 million on contracted providers, an increase of 133% from three years ago. DPS Health Services spent \$17.7 million on contracted nurses for in-prison services during the same fiscal year.

Reliance on contract healthcare staff presents two significant issues that decrease the likelihood of filling state employee vacancies to provide inmate healthcare services and could present risk.

- **Pay differences between contract staff and state employees.** Contract healthcare staff are paid at higher rates than state employees, which could disincentivize potential staff from pursuing and accepting state positions. DPS Health Services reported to the General Assembly in 2017 that registered nurses who are state employees are paid, on average and inclusive of benefits, \$14,072 less than their contract nurse counterparts, and that Licensed Practical Nurses are paid \$15,734 less than their contract counterparts. The 2017 Appropriations Act requires DPS to identify and eliminate 196 vacant state nursing positions and subsequently use these funds for contract positions in Fiscal Year 2018–19.³⁸ The Program Evaluation Division estimates the elimination of these 196 state nursing positions will lead to 47 fewer nurses serving prisons because of the higher rates paid to contract nurses.³⁹
- **Less training for contract staff.** During interviews, DPS Health Services staff stated that contracted staff often receive less training on DPS Health Services policies and procedures because these staff are only performing “basic” duties and are only likely

³⁸ N.C. Sess. Law 2017-57.

³⁹ The Program Evaluation Division further estimates that if the nursing positions eliminated in the 2017 Appropriations Act were instead retained and given a \$5,000 pay increase, on average and inclusive of estimated benefits, the same amount of funds would cover 30 more nurses compared to using those funds for contract nurses.

to work in a prison for a limited time. Training shortfalls potentially could present policy compliance issues and risks to the State.

Finding 6. Limited use of existing telemedicine resources contributes to unnecessary expenditures for outside provider visits and associated transportation costs.

To summarize the finding below, telemedicine has been implemented by many other state departments of corrections as a cost-containment tool. DPS Health Services estimates that it provides approximately 97% of psychiatric encounters through telemedicine, yet the potential of this technology is not being sufficiently realized for the provision of physical health services. An agreement between DPS Health Services and the University of North Carolina Health Care System (UNCHC) in 2012 specifies telemedicine was to be developed and expanded, but UNCHC has only provided one service at one prison facility through telemedicine since that time. In addition, DPS Health Services has initiated a pilot program with a private vendor to provide general health telemedicine services but has failed to estimate anticipated associated cost savings.

Telemedicine is a mode of delivering healthcare services that uses information and communications technologies to enable the diagnosis, consultation, treatment, education, care management, and self-management of patients who are at a distance from health providers. Telemedicine is considered ideal for use in prison settings because it

- offers greater security to providers and the public;
- provides more immediate healthcare services;
- eliminates the cost of transporting prisoners; and
- allows access to care for inmates in remote locations.

Research shows telemedicine is a primary tool state departments of corrections use to reduce the costs of inmate healthcare. Most states have initiated telemedicine to some degree, and its use has dramatically increased since the 1980s due to improved technology, electronic medical records, and pressures to control rising medical costs. Experts contend that the savings states realize from telemedicine are difficult to estimate, but some states (Texas, Michigan, and Ohio) have reported these savings. Further, because telemedicine is safer for providers, it may improve staff recruitment and retention and decrease reliance on contract staff.

DPS now provides almost all psychiatric services via telemedicine.

North Carolina successfully uses telemedicine to provide psychiatric services to inmates across the state. Psychiatric providers, who are either full-time state employees or contract workers, use Skype to lead 30-minute appointments with inmates who are accompanied by a prison employee. Psychiatrists enter medication management notes in DPS's electronic health records system, HERO, to inform other care providers about medication regimens. DPS Health Services estimates 97% of all psychiatric encounters with inmates are now conducted in this manner, which DPS believes has led to significant savings.

Although DPS is successfully using telemedicine for psychiatric services, this technology is used minimally in the provision of physical health services. For a period of time, telemedicine activities performed within North Carolina prisons included both psychiatric and physical health services. For more than 20 years, DPS Health Services maintained a memorandum of understanding with East Carolina University's medical school to provide physical health telemedicine services. In 2012, DPS entered into a new contract with the University of North Carolina Health Care System (UNCHC) to provide in-person specialty physical health care services at the new Central Prison Healthcare Complex (CPHC), thereby decreasing demand for specialty telemedicine services. The partnership with ECU's medical school subsequently ceased in 2016. However, prior to entering into its contract with UNCHC, DPS failed to conduct an analysis demonstrating the cost-effectiveness of on-site specialty care, including a cost comparison between contracted in-person services and telemedicine services.⁴⁰ Such analysis would have incorporated associated costs, such as the cost of transporting inmates from their prisons to CPHC in Raleigh, which can be avoided or limited by using telemedicine. Transportation costs include not only vehicle-related expenses but also costs associated with the use of dedicated custody officers who must travel with inmates, thereby altering facility staffing schedules. DPS does not collect systematic information on custody personnel and associated costs of transporting inmates to CPHC—or to any outside provider—and does not compare the costs of CPHC-provided on-site specialty services to telemedicine alternatives.

Although DPS and UNCHC have formally agreed to pursue telemedicine, little progress has been made. When UNC and DPS entered into their agreement in 2012 for UNCHC to provide healthcare to inmates, the contract stated that

“both parties agree to work diligently to implement appropriate telehealth services, recognizing the mutual cost savings potential of this innovative method of care delivery. Initial capability will focus on telehealth from UNCHC to CPHC and the North Carolina Correctional Institute for Women (NCCIW) health center, with eventual expansion to other facilities.”⁴¹

Although UNCHC providers continue to provide services on-site at CPHC, little progress has been made on developing non-psychiatric telemedicine activities. UNCHC currently partners with Mercy Virtual to provide telemedicine in other settings, but the only instance of telemedicine being used for inmate healthcare at present is an arrangement in which UNC physicians located on-site at Central Prison perform telemedicine sessions with Hepatitis C patients in the western part of the state. During site inspections, the Program Evaluation Division staff observed telemedicine equipment that appeared to be unused. DPS Health Services staff report

⁴⁰ Such providers could include ECU's medical school in addition to other state or private entities.

⁴¹ Telehealth is another term for telemedicine.

that prison telemedicine equipment is now outdated and needs to be replaced.

A 2012 report from the University of North Carolina's Kenan-Flagler Business School contained several recommendations related to UNCHC's development of telemedicine capabilities for evaluation and management of outpatient visits for inmates.⁴² The report recommended UNCHC begin a telemedicine partnership with DPS in four service areas: hepatology, cardiology, general surgery, and orthopedics. The report identified the following avoidable expenditures for both DPS and UNCHC:

- avoidable expenditures by DPS of approximately \$132 per trip for costs associated with transporting and providing custody to inmates receiving evaluation and management services from UNCHC providers and
- avoidable expenditures by UNCHC of approximately \$173 per trip in provider transportation costs and staff time.⁴³

These avoidable transportation and custody-related expenditures for both DPS and UNCHC persist because there is no robust telemedicine arrangement between the two entities. The report estimated telemedicine implementation would save DPS \$643,603 annually in transportation and custody costs. Further, the report identified nine additional service areas for which telemedicine partnerships could be established, which the Program Evaluation Division estimates could save DPS an additional \$742,111 annually in transportation and custody costs.⁴⁴ DPS Health Services officials stated they did not receive this report, which contained recommendations that, if implemented jointly with UNCHC for all 13 service areas, could have saved DPS an estimated \$1.4 million annually, or \$6.9 million over the last five years, in transportation and custody expenditures.

DPS is seeking to expand the use of telemedicine beyond sessions with Hepatitis C patients to include general health services provided by another vendor. DPS Health Services is working with a private vendor to develop a pilot project that would offer telemedicine services at Lanesboro Correctional Institution in Polkton, Anson County in 2018. During interviews, DPS Health Services staff said they plan to expand the pilot to the State's largest prisons first and then to smaller prisons. Instead of relying on UNCHC staff, the private vendor will provide licensed doctors and other medical specialists to provide care. These providers will have access to patient information and will be able to enter data into DPS Health Services's electronic medical record. The private vendor will provide rented equipment at Lanesboro, 24-7 technical support, and

⁴² UNC Kenan-Flagler Business School STAR Domestic Business Program. (2012). Telehealth Recommendations for UNC Health Care Relationship with NC Department of Corrections. The report states that telehealth has been found to be effective for evaluation and management of outpatient visits and has been used across many specialties at comparable programs. The report further discusses several of the non-financial benefits for both UNCHC and DPS in establishing such a telemedicine program.

⁴³ The estimates in the report were not adjusted for inflation. Other calculations in the report for UNCHC reimbursement for services relied on the 200% of Medicaid rate reimbursement rather than the contractual Medicaid reimbursement rate for UNCHC (262% of the Medicaid rate) for UNCHC. The report did not consider reimbursement at the contracted percentage of billed charges rate in effect for UNCHC (94%).

⁴⁴ The nine additional services were ear, nose, and throat; gastroenterology; infectious disease; neurology; oncology; optometry; podiatry; physical therapy evaluation; and urology.

Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliance. The pilot is estimated to cost approximately \$379,940 annually, excluding up-front implementation costs of \$4,500 and any after-hour triage consultations.

Like many pilot projects initiated in state government, the design of the telemedicine pilot project does not properly allow for evaluation of achievement of the program's objectives including any potential cost savings. Pilot programs are new initiatives implemented on a small scale that are intended to provide data showing whether or not they have the potential to succeed on a larger scale.^{45,46} Although DPS Health Services is taking steps to limit state expenditures by initiating this telemedicine pilot project, its failure to adhere to guidelines for the design, measurement, and evaluation of the program inherently limits its effectiveness. It does not appear that DPS Health Services has developed a formal evaluation plan for collecting non-anecdotal information on the services provided through the pilot program or for demonstrating any cost savings. In addition, it does not appear that the pilot will incorporate telemedicine into the triage process for determining the necessity of outside emergency hospital encounters.

Expanding telemedicine would be complementary to participation in a 340B program. In addition to the advantages detailed above, adoption of telemedicine can make participation in a 340B program easier (discussed in greater detail in the second Program Evaluation Division report of this series). Some states, such as New Jersey and Louisiana, are using telemedicine to perform examinations with HIV/AIDS patients every 90 days so that these patients only have to travel to a community medical facility once a year to qualify for the 340B program. Cost reductions associated with decreased travel can greatly enhance the benefits of 340B participation.

Recommendations

Recommendation 1. The General Assembly should consider establishing a position within DPS Health Services to support better use of data for performance measurement and management of methods to contain inmate healthcare costs.

As discussed in Finding 1, the Department of Public Safety's Health Services Division (DPS Health Services) collects a large amount of data on inmate healthcare, such as encounters by health services staff within prisons, claims data from outside providers, and purchasing information for pharmaceuticals and supplies. However, due to a lack of sufficient staff to analyze these data, DPS Health Services often undertakes activities to promote more efficient and effective operations without demonstrating whether these attempts are successful.

⁴⁵ Fiscal Research Division. (2008, August). Ten questions to better pilot programs. Fiscal Brief. Raleigh, NC: General Assembly.

⁴⁶ Previous Program Evaluation Division reports have explored pilot programs. Program Evaluation Division. (2014, March). Performance Measurement and Monitoring Would Strengthen Accountability of North Carolina's Driver Education Program. *Report to the 2014 Regular Session of the 2013 General Assembly*. Raleigh, NC: General Assembly; Program Evaluation Division. (2014, October). Overnight Respite Pilot at Adult Day Care Facilities Perceived as Favorable, but Lacked Objective Measures of Success. *Report to the 2014 Regular Session of the 2013 General Assembly*. Raleigh, NC: General Assembly.

To strengthen DPS Health Services's capacity for data analysis, the General Assembly should appropriate funds from the General Fund to the division to establish one new position, a Research and Policy Associate or equivalent job classification; this appropriation could be offset by other savings identified in this report as well as any data-driven cost savings implemented as a result of the work performed by this position. This position would report to the Director of the Health Services division.

This position would be responsible for combining and analyzing diverse types of data from several sources in order to extract actionable data discoveries and new trend analytics for inmate healthcare services. Data analyses performed by this position would allow DPS Health Services leaders across sections to identify factors increasing inmate healthcare costs and enable them to take action to limit such factors. Each of the provider section heads (medical, mental health, dental, and pharmacy) could use the data analysis performed by this position to develop performance standards for their offices, measure performance, and identify methods to contain costs. This position can further assist the Division by training staff on how to effectively use data from various systems to manage workloads and promote efficiencies.

Recommendation 2. The General Assembly should direct DPS Health Services to establish a formal electronic process of supply inventory management for prison facilities that includes continually tracking medical supplies and products, determining adequate supply levels, and performing effectiveness audits.

As discussed in Finding 1, DPS Health Services does not collect, monitor, or analyze expenditure data to ensure prison-maintained inventories of medical supplies and equipment are adequate or necessary to meet each prison facility's individual medical mission(s). A formal supply inventory process that regularly audits inventory levels ensures proper supply availability, prioritizes product use, and prevents over-purchasing.

The General Assembly should direct DPS Health Services to establish a formal, electronic supply inventory management process that includes

- recording the arrival and departure of each medical supply in use or in future use from the point of order including all methods of requisition and main storage locations (e.g., warehouse, secondary storage location, prison unit or infirmary);
- recording the dates on which a medical supply was at each transition point, including the date of use or disposal;
- identifying the DPS employee(s) in contact with a medical supply at each transition point, including at the time of use or disposal;
- developing a means for DPS Health Services to verify inventory data to ensure supplies are used prior to their expiration;
- determining adequate supply levels for each medical product currently in use or slated for future use based on usage of such items by facility; and

- conducting biannual audits of this process to continually reassess the need for particular medical supplies as well as determinations of the accuracy of records.

Recommendation 3. The General Assembly should direct DPS Health Services to develop a feasibility and implementation plan for Central Prison Healthcare Complex that includes methods to increase usage of the facility.

As discussed in Finding 1, although DPS Health Services has made substantial investments in prison healthcare facilities, the primary hospital facility serving most inmates (Central Prison Healthcare Complex, or CPHC) is not being used to its full potential. One Raleigh-area community provider stated that it receives many emergency room visits from inmates whose medical needs could be met by CPHC's urgent care facility. Further, CPHC's operating theater is only open for general anesthesia procedures Mondays through Thursdays and is reserved for local anesthesia procedures on Fridays.⁴⁷ These limitations lead to diminished use of CPHC's resources and a reliance on outside private services.

The General Assembly should direct DPS Health Services to develop a plan for enhancing the existing CPHC facility that includes the following components.

- **Ensure full use of CPHC's urgent care facility for non-medical emergencies.** One unit of CPHC is its urgent care facility, which provides around-the-clock services for all male inmates located within a 60-mile radius of Raleigh. The plan should outline current and anticipated actions for CPHC to take to limit the number of hospital visits to emergency rooms within a 60-mile radius of CPHC for purposes other than life-threatening emergencies. As part of this plan, DPS Health Services, in consultation with area community hospital providers, should identify common procedures performed by these facilities and reasons for non-life-threatening emergency visits. The plan should include an ongoing oversight component, including but not limited to the analysis of claims data, to ensure inmates with non-emergency needs are steered towards CPHC's urgent care facility rather than a community hospital facility. In addition, the plan should examine how any current or future telemedicine activities could assist in ensuring only inmates with life-threatening emergencies are sent to hospital emergency rooms. The plan should further identify necessary modifications to the triage system for nursing staff to ensure inmates with urgent care needs within a 60-mile radius of CPHC are sent to this facility instead of to an emergency room.

⁴⁷ The Program Evaluation Division contends procedures requiring local anesthesia do not necessarily need to be performed in an operating theater since non-incarcerated individuals often receive such procedures in a provider's office. Thus, such procedures could be performed in other locations within CPHC, leaving the operating theater available for general anesthesia procedures on Fridays thereby making better use of CPHC resources.

- **Cost comparisons of health services being performed in CPHC and the North Carolina Correctional Institution for Women versus being performed by outside providers.** This plan should include an analysis of data from the most recently completed fiscal year to determine and compare the costs of common procedures performed in the community as opposed to having them performed at CPHC for male inmates or NCCIW's health facility for female inmates. This information should include the cost of custody staff for transporting inmates, which has not been collected to date and would help provide a more accurate picture of differences in costs.
- **Comprehensive review of the use of CPHC and NCCIW health facilities.** The plan should include a comprehensive review of the current usage of CPHC's and NCCIW's resources and should consider the potential to maximize usage of the facilities through
 - increasing the usage of CPHC's operating theater for general anesthesia procedures and increasing usage of existing on-site equipment,
 - selling equipment no longer in use or not in use due to staffing changes,
 - increasing services available at CPHC to female inmates, and
 - pursuing other potential resource needs to save state funds.

This plan should be submitted to the Joint Legislative Oversight Committee on Justice and Public Safety by December 1, 2019 and include accomplishments to date, realized and estimated cost savings, and identify any obstacles in increasing the usage of CPHC and NCCIW's health services facilities.

Recommendation 4. The General Assembly should consider realigning the base budget for DPS Health Services and should direct the division and DPS to develop a unified method of budgeting at the prison-specific level for the health services DPS provides.

As Finding 2 discussed, DPS Health Services expenditures exceeded appropriations by approximately \$70 million in Fiscal Year 2016–17. DPS covers this structural deficit through the use of lapsed salary funds for non-DPS Health Services positions. Finding 2 further showed that some DPS Health Services positions are funded from budget fund codes other than the four codes to which appropriations are made. Thus, any reporting of expenditures that relies solely on these four codes is not fully reflective of inmate healthcare costs. Finally, Finding 2 showed the costs of inmate healthcare services are not identifiable at the prison level; for example, the costs of contract nurses or outside hospital encounters are aggregated at the entire state level, and the costs of such services for one prison are sometimes reflected in another's budget. Without collecting such information at the prison-specific level, DPS Health Services staff are unable to identify which prisons might be driving cost increases.

The General Assembly should consider reallocating \$70 million from DPS lapsed salary funds in sections outside inmate healthcare to DPS Health Services to better reflect the actual cost of providing these services. If the General Assembly pursues this option, it should consider soliciting the input of the department to identify which positions it relied upon for lapsed salary funds in Fiscal Year 2016–17 to fund its structural deficit. To realign the budget and make DPS Health Services budget-neutral, the General Assembly would need to eliminate these vacant positions used as a source of lapsed salary funds to fund inmate healthcare and transfer the funds to the budget fund codes for inmate healthcare as appropriate. Such a realignment would provide actual cost information on expenditures for inmate healthcare.

In addition, the General Assembly should direct DPS Health Services to conduct a review of its methods of accounting for expenditures to ensure all spending is reflected in one of the division's four designated budget fund codes. DPS Health Services should be required to conduct a review of its financial information and transfer any positions or lines of expenditure it relies upon from any other DPS budget fund code into one of these four division codes. Further, the General Assembly should direct DPS Health Services to revise its methods of budgeting and accounting for expenditures, such as for specific populations, to ensure health services expenditures are prison-specific. This requirement would ensure a prison's expenditures do not reflect any financial information for another prison or an overall category of expenditure except as necessary for central office functions. DPS Health Services should be required to report by October 1, 2019 to the Joint Legislative Oversight Committee on Justice and Public Safety on its progress in achieving these transfers and modifications to its financial practices.

Recommendation 5. The General Assembly should modify state law to reduce reimbursement rates paid to outside providers, direct DPS to modify information reported on claims, amend its contracts with two providers, and conduct internal audits of prevailing charges for outside services.

As discussed in Finding 3, current state law stipulates that community providers providing inmate health services for non-Medicaid-eligible inmates be reimbursed at the lesser of 70% of billed charges or two times (200%) the Medicaid rate. Four states require providers to be reimbursed at 100% of the Medicaid rate, and four other states connect their reimbursement rates to other state-sponsored programs (e.g., state health plans).

Finding 3 also showed that two outside entities are reimbursed at rates above those specified in statute; one entity is reimbursed at the lesser of 70% of billed charges or 280% of the Medicaid rate, and the second entity is reimbursed at the lesser of 94% of billed charges or 262% of the Medicaid rate. The Department of Public Safety (DPS) contends these less financially favorable terms for the State ensure access to care for inmates. However, no justification could be provided for the rates at which these

providers are reimbursed. Further, Finding 3 showed DPS does not conduct any audits of the prevailing rates outside providers charge for inmate services. State law grants DPS this authority, but the department has not exercised it.

The General Assembly should modify state law to reduce the Medicaid reimbursement factor from 200% to 100% of the Medicaid rate for outside services for non-Medicaid-eligible inmates.⁴⁸ Reducing the Medicaid reimbursement factor for outside providers would likely save the State at least \$2.6 million annually. The General Assembly also should direct DPS to develop amendments for any other contracts in place, except for the two contracts with currently less-favorable terms for the State, to reflect the recommended statutory reimbursement rate of the lesser of 70% of billed charges or 100% of Medicaid's payment rate. For the two provider entities with contractual terms currently less favorable to the State (UNC Hospitals and Vidant Health), the General Assembly should direct DPS to develop contract amendments to specify reimbursement rates for these providers at the lesser of 70% of billed charges or 200% of Medicaid's payment rate. Reducing the current reimbursement rates for these providers would still provide an incentive for these providers and should sufficiently ensure access to care for inmates as the terms they enjoy would continue to be more financially advantageous than reimbursement rates for other providers.

Additionally, the General Assembly should modify reporting requirements to require DPS to include the rates at which contracted providers are reimbursed.⁴⁹ This revision would provide the General Assembly with fuller information and eliminate any potential confusion about the financial advantageousness of contractual relationships. Further, the General Assembly should direct DPS to develop an internal mechanism with associated policies and procedures to randomly audit high-volume providers at regular intervals to ensure adherence with billing at prevailing rates. DPS should report to the Joint Legislative Oversight Committee on Justice and Public Safety by October 1, 2019 on its actions to develop the recommended contract amendments for outside providers and its plan to audit prevailing charges.

Recommendation 6. The General Assembly should direct DPS Health Services, in conjunction with the Department of Health and Human Services, to obtain federal reimbursement for Medicaid eligibility activities and direct DPS social workers to regularly receive formal Medicaid policy training.

As Finding 4 discussed, DPS Health Services employs four full-time social workers who are responsible for pre-screening inmates with qualifying hospital admissions for potential Medicaid eligibility. For those inmates believed to meet Medicaid eligibility criteria, these social workers compile and submit necessary information to county departments of social services for Medicaid eligibility determinations. At present, these four positions are

⁴⁸ N.C. Gen Stat. § 143B-707.3(a).

⁴⁹ N.C. Gen Stat. § 143B-707.3(c).

entirely funded by state appropriations. Finding 4 further showed that administrative activities related to Medicaid eligibility determinations are eligible for federal cost sharing, but DPS Health Services has not attempted to access this federal assistance.

The General Assembly should direct the Department of Health and Human Services (DHHS) to modify the Medicaid State Plan, or obtain waivers or amendments as necessary, to allow for central DPS Health Services social workers to qualify for and receive federal reimbursement for performing inmate Medicaid eligibility activities. Further, DPS Health Services should be directed to develop formal policies and procedures to account for the time its social workers spend on Medicaid eligibility activities and to develop a mechanism, in collaboration with DHHS, for receiving federal funding for such activities. DHHS and DPS Health Services should report to the Joint Legislative Oversight Committee on Justice and Public Safety by October 1, 2019, and quarterly thereafter until full implementation is achieved, on progress made towards receiving federal reimbursement. This report should include the actions taken in the most recent quarter as well as any anticipated legislative actions necessary to ensure implementation is successful.

In addition, the General Assembly should direct central DPS Health Services social workers performing activities related to inmate Medicaid eligibility to receive eligibility determination training at least quarterly, as DHHS already provides to staff of county departments of social services. This policy training will help ensure social workers submit Medicaid applications for as many inmates as possible and will keep them informed of any new developments in eligibility policy.

Recommendation 7. The General Assembly should direct DPS Health Services to collect and analyze data on the disposition of Medicaid applications and to electronically transfer applications and accompanying documentation to county departments of social services.

As discussed in Finding 4, the methods by which central DPS Health Services social workers collect data on Medicaid eligibility activities does not provide meaningful information for continuous improvement. Not only is limited information collected on the rationale that social workers use when deciding not to submit a Medicaid application, but information on the disposition of submitted applications is not sufficient for ensuring the effectiveness of the pre-screening process; inmates for whom social workers did not submit an application are recorded identically to those for whom Medicaid applications were submitted but denied. Further, Finding 4 showed that central DPS Health Services social workers can submit Medicaid applications to county departments of social services electronically but continue to send them through U.S. mail or courier services.

The General Assembly should direct DPS Health Services to revise its method of collecting data on Medicaid applications to require social workers to indicate the criteria believed to disqualify an inmate for

Medicaid when they decide not to submit an application. In addition, social workers should be required to modify their data entry method to allow for the identification of eligibility determinations made by county departments of social services. Further, social workers should be required to report monthly to the Director of DPS Health Services on their work, including

- number of 24-hour community provider stays pre-screened for potential applications,
- number of applications submitted, and
- number and percentage of applications approved, denied, and withdrawn.

Following implementation, this reporting requirement should begin to include comparisons of year-to-date statistics for comparison.

In addition, the General Assembly should direct central DPS Health Services social workers to no longer submit Medicaid applications and supporting information via U.S. mail or courier (except for documented circumstances requiring paper copies) and instead submit these materials electronically through DHHS's ePass portal beginning October 1, 2019. DPS Health Services staff should be directed to obtain necessary credentials from DHHS for the submission of multiple applications through this system. DPS Health Services should report to the Joint Legislative Oversight Committee on Justice and Public Safety by October 1, 2019 on the implementation of these activities related to data collection, analysis, and submission of Medicaid applications.

Recommendation 8. The General Assembly should direct DPS Health Services, in consultation with the Office of State Human Resources, to perform a salary study of inmate healthcare-related positions and report anticipated costs and savings from identified recruitment and retention initiatives.

As reported in Finding 5, DPS Health Services is experiencing high staff vacancy rates. Prison facilities experience three primary challenges in recruiting and retaining health services staff. First, staff may feel unsafe working in an environment with violent offenders, especially when there are high vacancy rates among custody staff. Second, prisons in rural areas must compete with other employers for scarce health services staff. Finally, health professionals in prisons are often paid less than contracted staff and less than the health services staff of other area employers. DPS Health Services has undertaken a number of efforts in order to recruit more staff, including making work schedule adjustments, hiring more recruiters, and eliminating prior experience requirements; however, the effectiveness of recruitment and retention efforts is not being measured.

The General Assembly should direct DPS Health Services and the Office of State Human Resources (OSHR) to conduct a salary study of all in-prison health services employees to determine what adjustments are necessary to bring DPS Health Services staff salaries up to market rates both for new hires and existing employees. One state that formerly

experienced high vacancy rates for health services staff in correctional institutions reported in 2015 that vacancy rates were greatly reduced as a direct result of increasing wages.

DPS also should be directed to establish a vacancy rate benchmark for each facility and create a plan to reduce vacancy rates accordingly. The study should consider the following initiatives to reduce vacancy rates:

- increase pay up to market levels;
- create a department-level student loan forgiveness program;
- offer signing bonuses and annual cash incentives;
- make additional use of telemedicine positions;
- create dual appointment opportunities for doctors currently employed by the State;
- offer differential pay for health service workers employed in difficult-to-staff facilities;
- streamline and potentially eliminate duplicative or unnecessary steps in the hiring process; and
- pursue other initiatives as determined by DPS leadership.

This study should outline anticipated methods to measure the effectiveness of such initiatives and estimate budget impacts and anticipated savings from the reduced reliance on outside contracted healthcare staff. It should further include necessary legislative changes, exemptions from existing statutes, and assistance required from OSHR and the Office of Rural Health to accomplish plan objectives. The study should be submitted to the Joint Legislative Oversight Committee on Justice and Public Safety by February 1, 2020.

Recommendation 9. The General Assembly should direct DPS to establish policies and procedures identifying common physical health services that can be performed via telemedicine, establish metrics relating to its current telemedicine pilot program, and submit an implementation plan and business case for expanding the pilot.

As Finding 6 discussed, DPS Health Services's use of telemedicine is largely limited at present to psychiatric services. Although the division owns several pieces of equipment for performing physical health-related telemedicine services, such services have not been provided in several years and staff report the equipment is now outdated. DPS Health Services recently established a pilot program with an outside vendor to provide physical health services to inmates via telemedicine. However, the pilot does not appear to be sufficiently well-designed to facilitate an evaluation of its cost-effectiveness. Further, it is unclear to what extent consideration of telemedicine will be incorporated into prison staff decisions to send inmates to local hospital facilities for emergencies as part of the division's triage process.

The General Assembly should direct DPS Health Services to establish performance measures for the current pilot program to inform a business case for potential expansion of the pilot and should prohibit DPS from expanding the pilot until results can be demonstrated and reported. As

part of this business case, DPS Health Services should be required to quantify savings achieved from telemedicine visits as compared to in-person visits from medical staff by collecting information about which procedures (such as intake screenings, sick calls, triage, or chronic disease management) are most conducive to being treated through telemedicine. Further, DPS Health Services should be required to propose an implementation plan to expand telemedicine with accompanying estimated cost savings, which at a minimum should incorporate prison facilities that rely extensively on community hospital facilities. The General Assembly should require DPS Health Services to report on its business case for telemedicine to the Joint Legislative Oversight Committee on Justice and Public Safety by April 1, 2020, and annually thereafter on efforts, expenditures, and savings related to telemedicine.

Appendices

Appendix A: Inmate Healthcare Expenditures by State from Fiscal Year 2010 to Fiscal Year 2015

Appendix B: History of Legislative and Auditor Actions Related to Inmate Healthcare

Appendix C: DPS Health Services Staff Vacancy Rates by County

Appendix D: DPS Use of State-Owned Vehicles for Recruitment and Retention

Agency Response

A draft of this report was submitted to the Department of Public Safety for review. Its response is provided following the appendices.

Program Evaluation Division Contact and Acknowledgments

For more information on this report, please contact the lead evaluator, Brent Lucas, at brent.lucas@ncleg.net.

Staff members who made key contributions to this report include Sara Nienow and Adora Thayer. John W. Turcotte is the director of the Program Evaluation Division.

Appendix A: Inmate Healthcare Expenditures by State from Fiscal Year 2010 to Fiscal Year 2015

State	Ranking by 2015 State Spending	SFY 2015 Per-Inmate Healthcare Expenditures	SFY 2010 Per-Inmate Healthcare Expenditures	Percentage Change in Expenditures	Monetary Change in Expenditures
California	1	\$19,796	\$15,827	25%	\$3,969
Vermont	2	\$13,747	\$11,581	19%	\$2,166
New Mexico	3	\$12,293	\$13,917	-12%	(\$1,624)
Wyoming	4	\$11,798	\$13,382	-12%	(\$1,584)
Massachusetts	5	\$8,948	\$9,056	-1%	(\$108)
Nebraska	6	\$8,583	\$7,567	13%	\$1,016
Oregon	7	\$8,456	\$7,225	17%	\$1,231
Delaware	8	\$8,408	\$7,092	19%	\$1,316
Michigan	9	\$8,287	\$8,020	3%	\$267
Minnesota	10	\$8,158	\$7,415	10%	\$743
Montana	11	\$8,084	\$7,156	13%	\$928
New Jersey	12	\$7,789	\$6,968	12%	\$821
Maine	13	\$7,397	\$7,965	-7%	(\$568)
Maryland	14	\$7,280	\$6,566	11%	\$714
Alaska	15	\$7,239	\$8,428	-14%	(\$1,189)
North Dakota	16	\$7,049	No Available Data	No Available Data	No Available Data
New York	17	\$7,047	\$6,701	5%	\$346
North Carolina	18	\$6,923	\$7,296	-5%	(\$373)
Rhode Island	19	\$6,902	\$6,016	15%	\$886
Washington	20	\$6,705	\$7,156	-6%	(\$451)
Colorado	21	\$6,641	\$5,807	14%	\$834
Tennessee	22	\$6,001	\$4,911	22%	\$1,090
Kansas	23	\$5,999	\$5,885	2%	\$114
Virginia	24	\$5,937	\$5,438	9%	\$499
Wisconsin	25	\$5,720	\$5,608	2%	\$112
Median		\$5,720	\$5,564		
Idaho	26	\$5,641	\$4,942	14%	\$699
South Dakota	27	\$5,626	\$4,781	18%	\$845
Connecticut	28	\$5,565	\$5,577	0%	(\$12)
Hawaii	29	\$5,422	\$5,550	-2%	(\$128)
Iowa	30	\$5,089	\$4,724	8%	\$365
Ohio	31	\$5,023	\$6,860	-27%	(\$1,837)
Missouri	32	\$4,942	\$4,909	1%	\$33
Utah	33	\$4,560	\$4,404	4%	\$156
Pennsylvania	34	\$4,548	\$4,913	-7%	(\$365)
Arkansas	35	\$4,186	\$4,642	-10%	(\$456)
Texas	36	\$4,077	\$4,032	1%	\$45
Florida	37	\$4,050	\$4,831	-16%	(\$781)
West Virginia	38	\$3,970	\$5,260	-25%	(\$1,290)
Mississippi	39	\$3,770	\$4,058	-7%	(\$288)
Kentucky	40	\$3,763	\$3,747	0%	\$16
Oklahoma	41	\$3,706	\$3,779	-2%	(\$73)
Illinois	42	\$3,619	\$3,478	4%	\$141
Georgia	43	\$3,610	\$3,871	-7%	(\$261)
Arizona	44	\$3,529	\$3,683	-4%	(\$154)
South Carolina	45	\$3,478	\$2,880	21%	\$598
Indiana	46	\$3,246	\$3,678	-12%	(\$432)
Nevada	47	\$3,246	\$4,126	-21%	(\$880)
Alabama	48	\$3,234	\$3,207	1%	\$27
Louisiana	49	\$2,173	\$1,396	56%	\$777

Notes: Table excludes New Hampshire. North Dakota did not report spending for 2010. All figures for 2010 and 2015 are expressed in 2015 dollars.

Source: Program Evaluation Division based on Pew Charitable Trusts (2017). "Prison Health Care: Costs and Quality."

Appendix B: History of Legislative and Auditor Action Relating to Inmate Healthcare

	Legislative Action	Office of the State Auditor Action
1994		Performance Audit Report — recommended DPS establish a separate Division of Health Services; utilize prison hospitals except in cases of emergencies; negotiate contracts with preferred provider hospitals; define the goals and mission of telemedicine and encourage use; initiate \$3 medical copayment for inmate medical appointments plus a \$1 fee for prescriptions; cancel or allow contracts for nursing positions to expire and fill vacant full-time positions; and utilize Central Pharmacy for all units.
2008	S.L. 2008-2 — created statutory language for eligibility criteria and processes for the medical release of certain inmates.	
2009	S.L. 2009-451 — specified medical services be obtained from providers of the State Health Plan network at specific reimbursement rates and a Request for Proposal be issued for a contractor to process claims and provide medical management services to the Department of Public Safety (DPS). Additionally required DPS consultation with the Division of Medical Assistance to develop Medicaid eligibility protocols. Specified use of DPS facilities whenever possible and that utilization be distributed equally among community hospitals.	Performance Audit Report — found that Central Pharmacy does not maintain adequate control or record keeping over inventory, which could prevent unauthorized use, theft, or loss of drug and supply purchases.
	S.L. 2009-575 — provided statutory deadlines for S.L. 2009-451 provisions and included provision that the State Health Plan and its claim processor are not responsible for equitable distribution of inmates among hospitals or other facilities.	
2010	S.L. 2010-31 — repeated provisions of S.L. 2009-451 and limited reimbursement to private providers for inmate patients to 70% of usual and customary charges of non-inmate patients. Also, required protocols to determine Medicaid eligibility and directed DPS to seek reimbursement when applicable. Directed DPS to explore other cost containment methods and submit quarterly reports on volume of scheduled and unscheduled services provided by community providers. Established a goal to limit community service provision to no more than 5% for any one community hospital.	Fiscal Control Audit — found amounts paid to providers are consistently greater than reimbursements allowable under Medicare for the same type and units of service.
2011	S.L. 2011-145 — limited reimbursement to private providers for inmate patients to lesser of 70% of amount charged for usual and customary charges or two times then-current Medicaid rate; repeated 5% or less community service provision goal from S.L. 2010-31 and quarterly report requirement.	Performance Audit Report — repeated findings in 1994 Performance Audit for utilization of prison hospitals and copayments. Also found instances where payments were made on claims that did not include authentication requirements and a lack of procedures in place to determine Medicaid eligibility. Made recommendation that DPS should verify services billed are services rendered.
	S.L. 2011-389 — granted the establishment of a pilot program to allow certain inmates who need personal care services and medication management to be released and placed in a licensed adult care home.	
2012	S.L. 2012-83 — established the Alcoholism and Chemical Dependency Treatment Program.	
	S.L. 2012-142 — repeated provisions of S.L. 2011-145 and added quarterly reporting requirements concerning Medicaid eligibility and efforts to contract with hospitals. Also required a study of the feasibility of creating technical violation centers.	Financial Related Audit — recommended that DPS expand and strengthen recovery audits.
2013	S.L. 2013-360 — allows for reimbursement for housing and extraordinary medical expenses of state inmates, directed DPS to make efforts to contain costs through use of its own hospital and healthcare facilities, modified reimbursement rates for community providers to be the lesser of 70% of provider's then-current prevailing charge or two times then-current Medicaid rate, and repeated provisions for quarterly reporting requirements, including annual reports on county prisoners housed in state facilities.	Financial Related Audit — found that inmate medical costs can be reduced by performing focused recovery audits on outside provider medical claims that are submitted for payment.
2015	S.L. 2015-241 — codified portions of S.L. 2011-145, codified reimbursement rates from S.L. 2013-360, included provision allowing DPS to audit charges to ensure compliance; and included additional reporting requirements.	
2016	S.L. 2016-94 — modified quarterly reporting requirements and commissioned a departmental study on contracted healthcare and service expansion.	

Source: Program Evaluation Division based on review of state statutes, session laws, and reports by the Office of the State Auditor.

Appendix C: DPS Health Services Staff Vacancy Rates by County

County	Total Gen. Hlth. Positions	Total Mnt. Hlth. Positions	Total Dental Positions	Total Pharma Positions	Total Positions	Vacant Gen. Hlth. Positions	Vacant Mnt. Hlth. Positions	Vacant Dental Positions	Vacant Pharma Positions	Total Vacant Positions	Vacancy Rate
Alexander	55	23	3	0	81	14	12	1	0	27	33%
Anson	38	12	4	0	54	16	3	0	0	19	35%
Avery	37	5	4	0	46	5	1	0	0	6	13%
Bertie	21	3	4	0	28	6	0	2	0	8	29%
Buncombe	14	4	3	0	21	1	1	0	0	2	10%
Burke	28	14	2	0	44	3	5	0	0	8	18%
Cabarrus	2	3	0	0	5	0	2	0	0	2	40%
Caldwell	12	1	2	0	15	1	0	0	0	1	7%
Carteret	2	0	0	0	2	1	0	0	0	1	50%
Caswell	10	0	2	0	12	0	0	0	0	0	0%
Catawba	2	0	0	0	2	0	0	0	0	0	0%
Columbus	32	3	4	0	39	6	2	0	0	8	21%
Craven	26	7	4	0	37	3	1	0	0	4	11%
Davidson	2	0	0	0	2	0	0	0	0	0	0%
Duplin	3	0	0	0	3	0	0	0	0	0	0%
Edgecombe	5	3	0	0	8	0	0	0	0	0	0%
Forsyth	2	2	0	0	4	0	0	0	0	0	0%
Franklin	5	0	0	0	5	0	0	0	0	0	0%
Gaston	2	0	0	0	2	0	0	0	0	0	0%
Granville	25.5	24	4	0	53.5	7	9	1	0	17	32%
Greene	123	59	7	0	189	29	17	0	0	46	24%
Halifax	17	1	2	0	20	3	0	0	0	3	15%
Harnett	15	6	3	0	24	3	0	0	0	3	13%
Hoke	31	4	1	0	36	1	1	0	0	2	6%
Hyde	8	0	1	0	9	0	0	0	0	0	0%
Johnston	13	2	0	0	15	2	1	0	0	3	20%
Lee	2	0	0	0	2	0	0	0	0	0	0%
Lincoln	3	0	0	0	3	0	0	0	0	0	0%
McDowell	24	5	3	0	32	1	2	0	0	3	9%
Montgomery	20	5	3	0	28	0	1	0	0	1	4%

County	Total Gen. Hlth. Positions	Total Mnt. Hlth. Positions	Total Dental Positions	Total Pharma Positions	Total Positions	Vacant Gen. Hlth. Positions	Vacant Mnt. Hlth. Positions	Vacant Dental Positions	Vacant Pharma Positions	Total Vacant Positions	Vacancy Rate
Nash	18	3	3	0	24	5	0	0	0	5	21%
New Hanover	12	2	1	0	15	0	1	0	0	1	7%
Northampton	8	1	0	1	10	0	0	0	0	0	0%
Orange	3	0	0	0	3	1	0	0	0	1	33%
Pamlico	5	0	2	0	7	1	0	1	0	2	29%
Pasquotank	17	5	2	0	24	3	2	0	0	5	21%
Pender	27	13	3	0	43	2	0	1	0	3	7%
Pitt	5	2	0	0	7	0	0	0	0	0	0%
Randolph	18	1	2	0	21	2	0	0	0	2	10%
Richmond	6	0	2	0	8	0	0	1	0	1	13%
Robeson	14	7	2	0	23	2	2	0	0	4	17%
Rowan	49	3	3	0	55	10	0	1	0	11	20%
Rutherford	2	0	0	0	2	0	0	0	0	0	0%
Sampson	5	0	0	0	5	0	0	0	0	0	0%
Scotland	32	4	5	0	41	4	2	1	0	7	17%
Stanly	16	1	1	0	18	0	0	0	0	0	0%
Tyrrell	7	0	0	0	7	1	0	0	0	1	14%
Union	1	0	0	0	1	0	0	0	0	0	0%
Wake	557.25	292.6	26.6	86.5	962.95	111	79	2	4	196	20%
Warren	20	3	2	0	25	1	2	1	0	4	16%
Wayne	32	5	4	0	41	10	2	0	0	12	29%
Wilkes	3	0	0	0	3	0	0	0	0	0	0%

Notes: Total Vacant Positions are as of June 30, 2017. Positions by county include administrative and other support staff that might not provide direct inmate healthcare.

Source: Program Evaluation Division based on data provided by the BEACON system and North Carolina Accounting System.

Appendix D: DPS Use of State-Owned Vehicles for Recruitment and Retention

As discussed in Finding 5, the Program Evaluation Division identified instances of DPS Health Services staff failing to comply with requirements governing the use of state-owned vehicles. These compliance issues are discussed in greater detail below.

Agencies are charged for the use of state-owned vehicles. The Division of Motor Fleet Management (MFM) within the Department of Administration administers a monthly vehicle charge that is calculated based on the mileage rate allotted to a vehicle multiplied by the mileage reported in the travel log. Additionally, agencies are charged a daily insurance reserve fee of \$35 per vehicle. Travel logs serve as documentation for permanently assigned vehicles; per MFM regulations, travel logs are to be completed daily, or on a per-trip basis, whenever the vehicle is active, and log entries are to be accurate representations of vehicle usage. All charges to maintain, repair, and replace vehicles are derived from the amount collected from agencies over the lifetime of the vehicle. This includes preventative and corrective maintenance.

DPS policy specifies the use of state-owned vehicles for official use only. DPS employees are permanently assigned state-owned vehicles under the assumption that the public vehicle will not be used for commuting or personal use except where exception has been approved and is applicable. Commuting privileges require prior approval of the agency head and MFM. DPS's travel policy defines commuting as travel conducted to and/or from employees' homes and their assigned duty stations. DPS provides three exceptions allowing for the use of a state-owned vehicle for transportation between an employee's residence and assigned workstation.

1. When an authorized business trip is to take place the next day and the employee's residence is closer to the destination than the regular workstation.
2. When the employee will need the vehicle, after completion of a regular work day, to conduct state business on the same day, or before usual working hours the next day.
3. When circumstances and job efficiency dictates a special need.

DPS policy dictates that emphasis should be placed on the economical use of all state-owned vehicles and that unnecessary trips shall be avoided. DPS travel policy states that granted exceptions are intended to be limited and meant only for occasional and isolated situations. Exceptions "shall not be utilized to circumvent the basic state-regulated vehicle assignment and commuting policy." MFM has determined that employees who routinely commute shall reimburse the State at the amount equivalent to the benefit derived from the use of the vehicle.

An employee's duty station is the assigned location of work as designated by the position title and requirements "rather than by the employee or their circumstances." MFM allows state employees to operate a state-owned vehicle in the performance of their job when they are in a travel status. Employees are considered to be in travel status if they are required to be away from their assigned duty stations in the performance of their jobs. DPS policy dictates that employee duty stations must be reviewed periodically to determine the cost-effectiveness of vehicle assignment at that location.

The Program Evaluation Division found that state-owned vehicles are used for recruitment and retention of DPS Health Services staff. The Program Evaluation Division identified instances of state-owned vehicles being given to employees for daily commuting to and from their homes, assigned duty stations, and one or more prison facilities.⁵⁰ This benefit resulted in at least \$99,000 in additional unreimbursed vehicle expenditures in Fiscal Year 2016–17.⁵¹ These expenditures are a result of misplaced duty station assignments that allow DPS employees to operate state-owned vehicles inefficiently and at a cost burden to the State. The Program Evaluation Division identified a sample of DPS-allotted state-owned vehicles and the assigned duty stations of

⁵⁰ The Internal Revenue Service classifies commuting privileges that amount to more than \$255 per month to be a taxable fringe benefit. Using this standard, the Program Evaluation Division found that, in its identified sample, 93.3% (\$93,137.86) of the total cost burden to the State for excessive driving was not excludable for DPS employees.

⁵¹ The Program Evaluation Division determined costs to the State for inefficient operation of state-owned vehicles to include mileage reimbursable as stated by the Internal Revenue Service, fuel costs incurred for vehicle operation outside of supposed duty stations, and monthly MFM insurance fees inclusive of the cost of preventative maintenance customarily associated with increases in vehicle mileage.

the employees operating the vehicles. The Program Evaluation Division then determined the usage of specific DPS facilities during the course of each employee's performance of their duties and compared the utilization to the assigned duty station. In this sample, some employees were found to have utilization rates of upwards of 90% at DPS facilities that were not their officially assigned duty stations.

Vehicle	Vehicle Make	Vehicle Model	Motor Fleet Management Rate (Dollar/Mile)	Identified Unreimbursed Cost Burden
200052	Chevrolet	Impala	\$0.36	\$7,872.61
210030	Chevrolet	Impala	\$0.36	\$9,840.66
220101	Chevrolet	Impala	\$0.36	\$9,015.77
240766	Chevrolet	Impala	\$0.36	\$9,499.11
240822	Chevrolet	Impala	\$0.36	\$9,250.36
260022	Chevrolet	Impala	\$0.36	\$16,765.03
260032	Chevrolet	Impala	\$0.36	\$9,939.18
170485	Chevrolet	Malibu	\$0.30	\$4,248.42
65586	Dodge	Caravan	\$0.33	\$7,769.15
55467	Dodge	Stratus	\$0.30	\$4,616.59
55486	Dodge	Stratus	\$0.30	\$5,490.94
56310	Ford	Taurus	\$0.33	\$5,493.70
Total				\$99,801.52

Source: Program Evaluation Division based on data provided by the Department of Administration and DPS.

In other words, the location at which these employees performed the highest portion of their work was not their assigned duty stations. In some instances, assigned duty stations were located closer to the employee's location of residence than location of work. From this sample, misplaced duty station assignments increased the mileage of state-owned vehicles by at least 44,000 miles and at least 733 hours of additional driving paid for by the State. In Fiscal Year 2016–17, the average cost burden of the Program Evaluation Division-identified sample was \$7,700. The average additional mileage burden was 5,000, and the average additional time driven was 91 hours. Increased mileage and hours driven in state-owned vehicles costs the State financially and increases liability.

The Program Evaluation Division found that DPS Health Services's lack of vehicle oversight did not prevent commuting privileges from being properly approved. Commuting privileges are reimbursable to the State and only deemed a proper use of public-owned vehicles when approved by MFM. In one instance, an employee that continually operated a state-owned vehicle from their assigned duty station and home over the course of a three-month period increased vehicle mileage by 9,000 miles and \$5,000 in expected costs that could be recoverable through reimbursement.

Motor Fleet Management reserves the ability to revoke any vehicle assignment. MFM may also require state agencies with publicly-owned vehicles to revoke an assignment. Reasons to revoke a vehicle assignment include the vehicle being used for a purpose other than official state business; inaccurate, incomplete, or unacceptable reports or no reports being submitted to MFM; reports or applications being falsified; reports bearing an improper signature; vehicle abuse; a vehicle not meeting the quarterly minimum mileage requirement of 3,150 miles and not having explicit exclusion from this rule; violations of motor vehicle laws; or other rules and regulations or policies being violated.



North Carolina Department of Public Safety
Prevent. Protect. Prepare.

Roy Cooper, Governor

Erik A. Hooks, Secretary

August 3, 2018

Mr. John Turcotte
Director, Program Evaluation Division
300 North Salisbury Street, Suite 100 LOB
Raleigh, NC 27603-5925

Re: *Improvements to Inmate Healthcare Reimbursement and Internal Processes Could Save \$5.6 Million Annually* (PED Report 2018-08)

Dear Mr. Turcotte,

I want to express my appreciation for the work of you and your team on the series of reports regarding the efficiency and economy of inmate healthcare within prisons operated by the North Carolina Department of Public Safety (DPS), Division of Adult Correction and Juvenile Justice. Inmate healthcare is complex, as Health Services must meet its statutory responsibilities within the confines of a controlled institutional setting and, when necessary, in a community setting through contractual arrangements with healthcare providers. Our staff strives to deliver healthcare that meets a community standard while also being good stewards of taxpayer money.

I also thank you for the opportunity to review and respond to the Program Evaluation Division's Report 2018-08: *Improvements to Inmate Healthcare Reimbursement and Internal Processes Could Save \$5.6 Million Annually*.

Recommendation 1: The General Assembly should consider establishing a position within DPS Health Services to support better use of data for performance measurement and management of methods to contain inmate health costs.

DPS agrees that additional data collection and analysis could assist in providing more efficient and effective health services. Having a dedicated staff to focus on data analysis would offer an independent view of multiple data points pulled from various systems, and could help in detecting trends across various disciplines, locations, and inmate demographics. The complexity of the healthcare system, the distribution of services across 57 facilities, and the expectation and need to link with Community Corrections and local re-entry councils regarding offenders' healthcare needs likely warrant more than one data analyst position to fully meet the intent of this recommendation.

Recommendation 2. The General Assembly should direct DPS Health Services to establish a formal electronic process of supply inventory management for prison facilities that

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includes continually tracking medical supplies and products, determining adequate supply levels, and performing effectiveness audits.

DPS supports the concept of establishing an electronic supply inventory system with bar coding to track and monitor use. The Department explored this option in 2012, but ultimately was not successful in its efforts to award a contract. Additional funds will be needed to purchase and implement an electronic inventory system. Currently, each prison facility has an established inventory level of supplies to be maintained based on the acuity level of inmates assigned to the prison. (Policy AD VII-1 Facilities, Equipment & Supplies)

Recommendation 3. The General Assembly should direct DPS Health Services to develop a feasibility and implementation plan for Central Prison Healthcare Complex that includes methods to increase the facility's utilization.

The Central Prison Healthcare Complex (CPHC) Urgent Care currently operates 24/7 with both nursing and provider coverage to facilities within and beyond a 60-mile radius (if patient is medically cleared for transport). In an effort to increase use and decrease outside hospital utilization, DPS Health Services will track emergency room visits for facilities within a 60-mile radius. DPS Health Services will focus on diagnoses, treatment rendered at outside facility, and referring provider to identify any barriers that kept the offender from being treated at CPHC.

CPHC is one of five facilities that provide after-hours telephone triage support for prisons throughout the state. DPS Health Services will continue the telephone triage process and continue to explore the use of telemedicine services to support all facilities after hours.

DPS Health Services supports the concept of comparing costs of procedures performed at CPHC and North Carolina Correctional Institution for Women (NCCIW) with those performed in community settings.

DPS Health Services is committed to maximizing the use of CPHC and the NCCIW health facilities. Female offenders are currently receiving limited services to include oral surgery and diagnostic procedures at CPHC. To expand the CPHC operating suite utilization, general surgery will dedicate one of its four operating room days per month for female healthcare. As of July 1, 2018, the contract vendor has made anesthesia staff available five days a week, which will increase utilization as they previously were unable to provide coverage on Fridays.

Recommendation 4. The General Assembly should consider realigning the base budget for DPS Health Services and should direct the Division and DPS to develop a unified method of budgeting at the prison-specific level for the health services DPS provides.

The Program Evaluation Division states in Finding 2 that medical services are funded through a "structural deficit." This means that the Department does not receive adequate funds to cover its ongoing expenses, and funds must be redirected from other sources to cover the costs of inmate healthcare. This finding is correct and has been the case for decades. The Department has consistently used lapsed salary to cover the unbudgeted costs of healthcare for the inmate population. Production of lapsed salary is a natural occurrence in a department the size of DPS;

natural attrition in an agency with 25,000 positions in its General Fund means that a number of positions will be vacant at all times, producing lapsed salary. For years, this money has been used to patch the unbudgeted hole in inmate medical expenditures. The Department supports a budget alignment effort that would include adequate resources specifically earmarked to meet the needs of the currently and historically underfunded inmate healthcare operation without eliminating positions needed for custody and security operations, healthcare and other auxiliary support functions such as maintenance. Further, given the difficulty of recruiting full-time clinicians, the Department's reliance on contract providers for primary care services contributes to the increasing cost requirement for constitutionally mandated medical care.

DPS Health Services is a section within the Division of Adult Correction and Juvenile Justice. To realign the budget such that overall healthcare spending is captured at individual prisons is problematic for several reasons. First, the overwhelming majority of healthcare services is provided at CPHC and NCCIW. In addition, inmates are routinely transferred to different prisons depending on their custody level, health, and program needs. Consequently, it would be difficult to accurately assign costs to a facility when the inmates who incurred the costs may no longer be housed there for reasons having nothing to do with their health conditions, i.e., they may need to be moved for security reasons. Also, in some cases, healthcare staff from a larger facility may provide staff coverage for a nearby smaller facility. As a result, it would be inaccurate to account for all of those positions' costs at one facility or the other. Given the population management needs of the prison system, facility-based budgeting will likely not enhance the Department's ability to forecast needs.

DPS Health Services currently provides enhanced chronic disease management to over 40% of its population. These medical conditions include, but are not limited to, diabetes, hypertension, infectious disease, cancer and mental illness. The skyrocketing costs of pharmaceuticals, specifically the treatment of Hepatitis C and cancer, continues to have a significant cost impact on the Department.

Additional earmarked funds for inmate healthcare operations should include significant funding for the fiscal burden of treating inmates suffering from Hepatitis C. While medications amounting to a cure of Hepatitis C are now available, those medications remain extremely expensive, costing between \$8,200 and \$10,600 for a single month of treatment. The Department's current Hepatitis C protocol does not provide treatment for every inmate who may be positive for the virus but rather prioritizes treatment based on the individual patient's need. However, case law in other jurisdictions indicates this approach, while common, may not continue to be favored, as some courts have held that any inmate infected with Hepatitis C is entitled to treatment. Prisoner Legal Services and the American Civil Liberties Union filed a federal class action lawsuit June 15, 2018 against the Department on behalf of inmates seeking assessment of their level of disease and ongoing medical care for complications and symptoms of Hepatitis C. Should a court impose a burden upon the Department to test every inmate for Hepatitis C and to give every inmate who is found to be positive direct-acting anti-viral therapy, the cost to the Department may well be astronomical. In addition, 21% of the inmate population is age 50 or greater, which brings additional cost considerations. The increased costs of on-site care (to include physical plant modifications and increased medical equipment), off-site care,

outpatient medical products, and long-term care for the deteriorating inmate health profile has significantly increased the demands on our prison healthcare system.

Furthermore, as the prison population ages, a larger number of offenders, particularly those with sentences of Life Without Parole, will face their final days in the prison setting, requiring community-standard palliative care. With legislative approval in SL 2015-241, Sec. 31.22, the Department retrofitted a section of Central Prison to provide space for palliative and long-term care adjacent to the hospital complex, and in 2017 and 2018, requested operating and equipment funds to open the unit for inmates. No funds have been appropriated, so the Department will not be able to provide palliative care services in this area, and will need to continue using more expensive hospital beds in the CPHC or placing inmates in private facilities through extended limits of confinement, while still maintaining supervision over their custody.

Recommendation 5. The General Assembly should modify state law to reduce reimbursement rates paid to outside providers, direct DPS to modify information reported on claims, amend its contracts with two providers, and conduct internal audits of prevailing charges for outside services.

The PED report suggests the General Assembly should modify rates set in statute for reimbursing community providers, mostly hospitals, for medical services for inmates. The statutory rate is 70% of billed charges or 200% of the current Medicaid rate. These rates were set in session law by the General Assembly beginning in 2010. The language as originally drafted limited what amount the Department can pay, as the General Assembly cannot tell a private provider what they may charge. By extension, the Legislature cannot order private providers to provide services for a specific population. For this reason, the Legislature subsequently provided the option for the Department to execute contracts at higher rates to achieve overall savings or to ensure continuous access to care. This language was codified as G.S. 143B-707.3(a) in 2015. This language was written into contracts with some providers over the years, most notably UNC Healthcare, the Department's primary outside provider. The UNC contract expired in October 2017, and has been extended pending contract negotiations, which are ongoing as of this writing. The Department has no objection to a reduction in these payment rates, but requires assurance that current service levels can be maintained from private partners.

Recommendation 6. The General Assembly should direct DPS Health Services, in conjunction with the Department of Health and Human Services, to obtain federal reimbursement for Medicaid eligibility activities and direct DPS social workers to regularly receive formal Medical policy training.

DPS will explore its potential entitlement to obtain federal reimbursement for Medicaid eligibility activities and will work with DHHS to initiate the process to seek the reimbursement, if eligible. DPS supports ongoing training for its social workers who review cases and submit Medicaid applications and will work with DHHS to ensure notification and enrollment of DPS Health Services staff to attend training currently offered to county departments of social services.

Recommendation 7. The General Assembly should direct DPS Health Services to collect and analyze data on the disposition of Medicaid applications and to electronically transfer applications and accompanying documentation to county departments of social services.

DPS concurs with the recommendation to document information related to reasons that potentially disqualify an inmate from Medicaid eligibility, and to collect data on a regular basis related to inmates screened for Medicaid eligibility. Further, the Department will explore the possibility of using the DHHS ePass portal to submit Medicaid applications when it is available.

Recommendation 8. The General Assembly should direct DPS Health Services, in consultation with the Office of State Human Resources, to perform a salary study of inmate healthcare-related positions and report anticipated costs and savings from identified recruitment and retention initiatives.

DPS supports the recommendation to study inmate healthcare-related positions. High healthcare vacancy rates have been an ongoing concern of DPS leadership for many years. The healthcare field is one of the fastest growing occupational fields in the country, and DPS will continue to face stiff competition for medical professionals from both the private and public sectors. As reported in December 2017 to the Justice and Public Safety Legislative Oversight Committee, DPS has initiated several measures to assist with recruitment and retention, including re-purposing four positions to work exclusively as recruiters, and establishing four nurse educator positions to promote successful onboarding of new hires. Similar to custody classifications, Health Services faces geographic and institutional challenges in recruiting medical professionals. DPS typically has lower vacancy and turnover rates in the western part of the state. Also, Health Services has more success recruiting and retaining staff in facilities that house inmates who have less serious medical and mental health conditions. DPS is committed to re-examining its staffing patterns, salary administration guidelines, and hiring processes to ensure that it is doing everything feasible to recruit and retain quality staff.

In Finding 5, PED asserts that in some cases the agency is not in compliance with policy regarding the use of state vehicles. DPS operates facilities throughout all regions of the state. DPS Health Services staff who provide regional oversight are organizationally assigned to the DPS Central Office although their responsibilities dictate that they travel frequently to facilities in their assigned region. These staff are assigned a state vehicle that is staged strategically within their geographic region of responsibility which allows the employee to efficiently travel to their assigned facilities and respond quickly to emergency situations as they arise.

Recommendation 9. The General Assembly should direct DPS to establish policies and procedures identifying common physical health services that can be performed via telemedicine, establish metrics relating to its current telemedicine pilot program, and submit an implementation plan and business case for expanding the pilot.

DPS has had 25 years of experience regarding telemedicine, beginning with its relationship with East Carolina University, which provided services in lieu of on-site specialists. Unfortunately, ECU was unable to sustain provider support which resulted in termination of the contract. DPS then contracted with UNC through a revised master agreement to provide on-site specialty

services at CPHC and NCCIW. This relationship resulted in the addition of approximately 17 specialty services split between these facilities, which reduced the need for telemedicine services. However, a particular area of concern was the lack of on-site psychiatric services. Therefore, DPS partnered with the UNC department of psychiatry for both on-site and tele psychiatry services.

It is important to clarify that DPS Health Services is currently exploring the possibility of establishing a pilot program to provide telemedicine services after-hours during the week in addition to weekends and holidays. If the pilot is initiated and completed, a study will be conducted to determine whether these services have been cost-effective. If the proposed pilot is successful, it is anticipated DPS will expand the telemedicine project to include normal business hour specialty clinics at all 57 facilities. Performance measures would be developed to determine the effectiveness of the program from operational, clinical, and fiscal perspectives.

Again, thank you for the opportunity to review and respond to PED's Report 2018-08: *Improvements to Inmate Healthcare Reimbursement and Internal Processes Could Save \$5.6 Million Annually.*

Sincerely,



Erik A. Hooks
Secretary
North Carolina Department of Public Safety