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Report to Congressional Requesters

June 2017

BUREAU OF PRISONS

Better Planning and Evaluation Needed to Understand and Control Rising Inmate Health Care Costs

GAO-17-379

GAO Highlights

Highlights of GAO-17-379, a report to congressional requesters

June 2017

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Better Planning and Evaluation Needed to Understand and Control Rising Inmate Health Care Costs

Why GAO Did This Study

As of June 2017, BOP was responsible for the custody and care—including health care—of about 154,000 inmates housed in BOP institutions. Health care includes medical, dental, and psychological treatment. BOP provides most care inside its institutions, but transports inmates outside when circumstances warrant. GAO was asked to review health care costs at BOP institutions.

This report addresses: (1) BOP's costs to provide health care services and factors that affect costs; (2) the extent to which BOP has data to help control health care costs; and (3) the extent to which BOP has planned and implemented cost control efforts.

GAO analyzed BOP health care obligations data for fiscal years 2009 through 2016, gathered information on BOP's health care cost control initiatives through a data collection instrument, and reviewed BOP's health care related strategic plans. GAO also interviewed BOP officials and visited 10 BOP institutions, selected in part, for total and per capita medical services costs.

What GAO Recommends

GAO is making five recommendations, including that BOP conduct a cost-effectiveness analysis to identify the most effective method to collect health care utilization data; conduct a spend analysis of health care spending data; evaluate cost control initiatives; and enhance its planning efforts by incorporating elements of a sound planning approach. BOP concurred with the recommendations.

View GAO-17-379. For more information, contact Gretta L. Goodwin at (202) 512-8777 or goodwing@gao.gov

What GAO Found

From fiscal years 2009 through 2016, the Bureau of Prisons (BOP) obligated more than $9 billion for the provision of inmate health care and several factors affected these costs. Obligations for health care rose from $978 million in fiscal year 2009 to $1.34 billion in fiscal year 2016, an increase of about 37 percent. On a per capita basis, and adjusting for inflation, health care obligations rose from $6,334 in fiscal year 2009 to $8,602 in fiscal year 2016, an increase of about 36 percent. BOP cited an aging inmate population, rising pharmaceutical prices, and increasing costs of outside medical services as factors that accounted for its overall costs.

Bureau of Prisons (BOP) Institution Obligations for Inmate Health Care, Including Psychological Care, and Inflation Adjusted Per Capita Obligations from Fiscal Years 2009 through 2016

	Fiscal year							
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Total health care obligations (millions)	**$978**	**$1,035**	**$1,081**	**$1,122**	**$1,200**	**$1,243**	**$1,299**	**$1,344**
Per capita obligations (2016 dollars)	$6,334	$6,495	$6,485	$6,627	$6,998	$7,350	$7,958	$8,602

Source: GAO analysis of BOP data. | GAO-17-379

BOP lacks or does not analyze certain health care data necessary to understand and control its costs. For example, while BOP's data can show how much BOP is spending overall on health care provided inside and outside an institution, BOP lacks utilization data, which is data that shows how much it is spending on individual inmate's health care or how much it is expending on a particular health care service. BOP has identified potential solutions for gathering utilization data, but has not conducted a cost-effectiveness analysis of these solutions to identify the most effective solution. BOP also does not analyze health care spending data, i.e., what its institutions are buying, from whom, and how much they spend. BOP has pursued some opportunities to control its health care spending through interagency collaboration and national contracts, but it has not conducted a spend analysis to better understand trends. Doing so would provide BOP with better information to acquire goods and services more strategically.

BOP has initiatives aimed to control health care costs but could better assess effectiveness and apply a sound planning approach. Since 2009, BOP has implemented or planned a number of initiatives related to health care cost control, but has not evaluated their cost-effectiveness. Further, BOP has engaged in a strategic planning process to help control costs, but has not incorporated certain elements of a sound planning approach, such as developing a means to measure progress toward its objectives and identifying the resources and investments needed for its initiatives. By incorporating these elements, BOP could enhance its planning and implementation efforts before expending resources, better positioning itself for success as it aims to control health care costs.

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Abbreviations

AASLD	American Association for the Study of Liver Diseases
BEMR	Bureau Electronic Medical Record
BOP	Bureau of Prisons
BOPMOP	BOP Mail Order Pharmacy
CT	Computerized tomography
DOJ	Department of Justice
FCC	Federal Correctional Complex
FCI	Federal Correctional Institution
FDA	Food and Drug Administration
FDC	Federal Detention Center
FMC	Federal Medical Center
FMIS	Financial Management Information System
FPDS-NG	Federal Procurement Data System-Next Generation
FSS	Federal Supply Schedule
FTC	Federal Transfer Center
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
HSD	Health Services Division
JMD	Justice Management Division
MCC	Metropolitan Correctional Center
MCFP	Medical Center for Federal Prisoners
MRI	Magnetic resonance imaging
NHE	National health expenditures
NHEA	National Health Expenditure Accounts
OIG	Office of Inspector General
OMB	Office of Management and Budget
RDAP	Residential Drug Abuse Program
SOC	Sub-Object Classification
USP	U.S. Penitentiary
VA	Department of Veterans Affairs

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441 G St. N.W.
Washington, DC 20548

June 29, 2017

The Honorable Charles E. Grassley
Chairman
Committee on the Judiciary
United States Senate

The Honorable Claire McCaskill
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The mission of the Department of Justice's (DOJ) Federal Bureau of Prisons (BOP) is to protect society by confining offenders in facilities that are safe, humane, cost-efficient, and appropriately secure. As part of its duties, BOP is responsible for delivering adequate health care, including medical, dental, and mental health care, in a manner consistent with accepted community standards for a correctional environment.[1] BOP reported obligating almost $1.2 billion of its $6.9 billion appropriation to the medical and dental care of inmates for fiscal year 2016.[2] These costs include various categories, such as medical, dental, and psychiatric staff salaries within BOP institutions; pharmaceuticals and medical supplies; and expenses associated with inmates receiving care at a local health care provider, such as a hospital, when BOP cannot provide the necessary care in-house.[3] In addition, for fiscal year 2016, BOP reported obligating more than $70 million to provide mental health treatment to inmates, including psychological treatment such as group and individual psychotherapy sessions, psychology treatment programs, and sex

[1]BOP's Health Services Administration Program Statement states that BOP is to deliver medically necessary health care to inmates in accordance with proven standards of care. See BOP Program Statement 6010.05, *Health Services Administration*, June 26, 2014.

[2]An obligation is a definite commitment that creates a legal liability of the government for the payment of goods and services received. BOP combines medical, dental, and psychiatric care in its reporting of medical services obligations. Mental health care is reported separately in its Psychology Services obligations. The $6.9 billion appropriation is for the Salaries and Expenses portion of BOP's fiscal year 2016 annual appropriation and does not include the separate Buildings and Facilities appropriation for fiscal year 2016.

[3]BOP distinguishes between medical services and psychology services, which are accounted for separately in BOP's budget. Psychiatric staff salaries are included in medical services obligations as psychiatrists have the authority to prescribe medication.

offender treatment programs.[4] BOP's fiscal year 2017 Congressional Budget Justification shows medical services and psychological services funding increasing annually, and BOP expects costs to continue to increase in the future, driven by, among other things, rising costs across the health care industry, including pharmaceutical costs, and the expanded needs of the aging inmate population.

Multiple U.S. courts over the years have determined that inmates have a constitutional right to adequate medical and mental health care.[5] By statute, BOP is required to provide for suitable housing and the safekeeping, care, and subsistence of all persons charged with or convicted of offenses against the United States.[6] In light of the importance of providing health care to BOP inmates, and the rising costs associated with providing care, you asked us for information on BOP's costs for inmate health care, factors that are impacting costs, and what initiatives BOP has undertaken to address rising costs. This report addresses the following questions: (1) How much did BOP obligate for inmate health care from fiscal years 2009 through 2016 and what factors affect BOP's costs? (2) To what extent does BOP have data available to understand and help control its health care costs? (3) What initiatives has BOP identified and implemented to help control health care costs and how effectively has BOP planned its health care cost control efforts?

To address these questions, we interviewed BOP officials knowledgeable about health care costs and cost control efforts from several divisions and offices, as well as officials at BOP's six regional offices. We conducted site visits to 10 BOP institutions, and selected these institutions based, in part, on factors that both BOP and existing research indicated could be affecting costs, such as inmate characteristics and geography, as well as other factors that allowed for variation in our sample (see app. I for more

[4]See our prior work on BOP inmate mental health care. GAO, *Bureau of Prisons: Timelier Reviews, Plans for Evaluations, and Updated Policies Could Improve Inmate Mental Health Services Oversight*, GAO-13-1 (Washington, D.C.: July 17, 2013).

[5]For example, the United States Supreme Court held in the case of *Brown v. Plata,* 563 U.S. 493, 497 (2011), that adequate medical and mental health care must meet minimum constitutional requirements and meet prisoners' basic health needs. Similarly, the United States Supreme Court concluded in the case of *Estelle v. Gamble*, 429 U.S. 97, 104 (1976), that deliberate indifference to the serious medical needs of prisoners by prison personnel constitutes the unnecessary and wanton infliction of pain prohibited by the Eighth Amendment.

[6]18 U.S.C. § 4042(a)(2).

details on our selection criteria). In addition, we reviewed key documents, such as BOP's Congressional Budget Justifications for fiscal years 2009 through 2018.

To examine how much BOP has obligated for inmate health services over the past 8 fiscal years and the factors that affect BOP's costs, we reviewed key documents, such as BOP's Annual Financial Statements, and the Department of Justice's Financial Management Information System Sub-Object Classification (SOC) Code Guide.[7] We also analyzed BOP obligation data from fiscal years 2009 through 2016 on medical services, psychology services, drug and sex offender treatment programs, and medical staff training. We included 8 years of obligations data in order to observe trends over time in health care costs. We included all categories of care that are considered essential to treating health, including mental health and substance use disorder treatment. To determine the per capita obligations, we divided the total obligation by the inmate population at the end of each fiscal year. We adjusted these data to reflect health care inflation. To better understand the composition of medical services obligations, we analyzed obligations by SOC code. To understand the changes in pharmaceutical expenditures over the period we reviewed, as well as what illnesses were impacting those obligations, we analyzed BOP's list of top 50 medications for fiscal years 2009 through 2016. We compared these medications to the U.S. National Library of Medicine's MedlinePlus list of drugs and supplements, in order to determine their uses.[8] To assess the reliability of BOP's obligations and expenditures data, we performed electronic testing for obvious errors in accuracy and completeness, and interviewed agency officials knowledgeable about BOP's budget to determine the processes in place to ensure the integrity of the data. We determined that the data were sufficiently reliable for the purposes of this report. Finally, since geographic location may impact the provision or cost of inmate health

[7]Federal agencies use SOC Code Guides to standardize budgetary information. SOC codes define the nature of services or articles obligated, and include codes for items such as personnel compensation, rent, supplies, and contractual services.

[8]MedlinePlus, produced by the National Library of Medicine, is the National Institutes of Health's website that contains extensive information on prescription and nonprescription drugs, in addition to information on over 1,000 diseases and conditions.

care, we analyzed BOP institutions' proximity to hospitals.[9] To do this, we used geographic information services software to map the addresses of all BOP institutions, and identify how many hospitals were within a 20 mile radius of the institution.

To examine the extent to which BOP has data available to understand and help control its health care costs, the initiatives BOP has identified and implemented to help control health care costs, and how effectively BOP has planned and implemented these initiatives, we reviewed relevant BOP program statements. We also conducted interviews with BOP officials knowledgeable about cost control initiatives. Further, we reviewed Office of Management and Budget (OMB) guidance on cost-effectiveness analysis and BOP policies to assess the extent to which BOP analyzed its efforts to gather data. To determine the extent of available data on BOP health care spending, we searched the Federal Procurement Data System-Next Generation (FPDS-NG) for BOP contract actions for fiscal years 2009 through 2015 and obtained pharmaceutical obligations data from BOP for that same period.[10] Based on these steps, we determined the data were sufficiently reliable for the purposes of our reporting objective.

To determine how well BOP's health care cost control planning mechanisms work, we obtained and reviewed selected portions of the annual BOP-wide strategic plans for 2009 through 2015, BOP's Health Services Division (HSD) Governing Board Meeting Minutes through 2015, and the HSD Strategic Plan for 2015 through 2019. To identify BOP's health care cost control efforts, their status of implementation, and the extent to which BOP had conducted cost estimates for each, we interviewed BOP officials and reviewed documents they provided, as well as reviewed relevant GAO reports and DOJ Office of Inspector General

[9]For the purposes of our analysis, a hospital is defined as a building or building complex providing general medical or surgical inpatient care. It includes general hospitals, specialty hospitals (such as cancer, maternity, substance abuse, psychiatric, and rehabilitation hospitals). It does not include psychiatric or behavioral facilities that are not hospitals, long-term care medical centers or nursing homes, walk-in centers or outpatient clinics, imaging centers, medical doctors' offices, and rehabilitation centers.

[10]FPDS-NG is a single source for U.S. government-wide procurement data. Managed by the General Services Administration, it is the central repository of information on federal contracting. The system contains detailed information on contract actions over $3,500.

(OIG) reports.[11] We summarized this information into a data collection instrument for verification by BOP officials and requested additional data and supporting documentation for each initiative. We also interviewed officials from DOJ OIG and DOJ's Justice Management Division[12] to discuss prior DOJ report recommendations on BOP health care costs. We interviewed officials at the 10 institutions we visited, observed health care programs and cost control efforts, and obtained documents relating to the costs and cost savings of regional and institutional initiatives to control health care costs. Appendix I contains a more detailed discussion of our objectives, scope, and methodology.

We conducted this performance audit from February 2016 to June 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[11]See for example: GAO, *Bureau of Prisons: Information on Efforts and Potential Options to Save Costs*, GAO-14-821 (Washington, D.C.: Sept. 30, 2014). DOJ OIG, *The Federal Bureau of Prison's Efforts to Manage Inmate Health Care*, Audit Report 08-08 (Washington, D.C.: Feb. 2008); and *Follow-Up Audit of the Federal Bureau of Prisons' Efforts to Manage Inmate Health Care*, Audit Report 10-30 (Washington, D.C.: July 2010).

[12]DOJ's Justice Management Division (JMD) provides DOJ with advice on policy for budget and financial management, program evaluation, auditing, personnel management and training, procurement, information processing and telecommunications, security, and for all matters pertaining to organization, management, and administration. In 2012, JMD budget staff issued an assessment of BOP's method for procuring medical services and potential ways to reduce costs, including cost savings opportunities.

Background

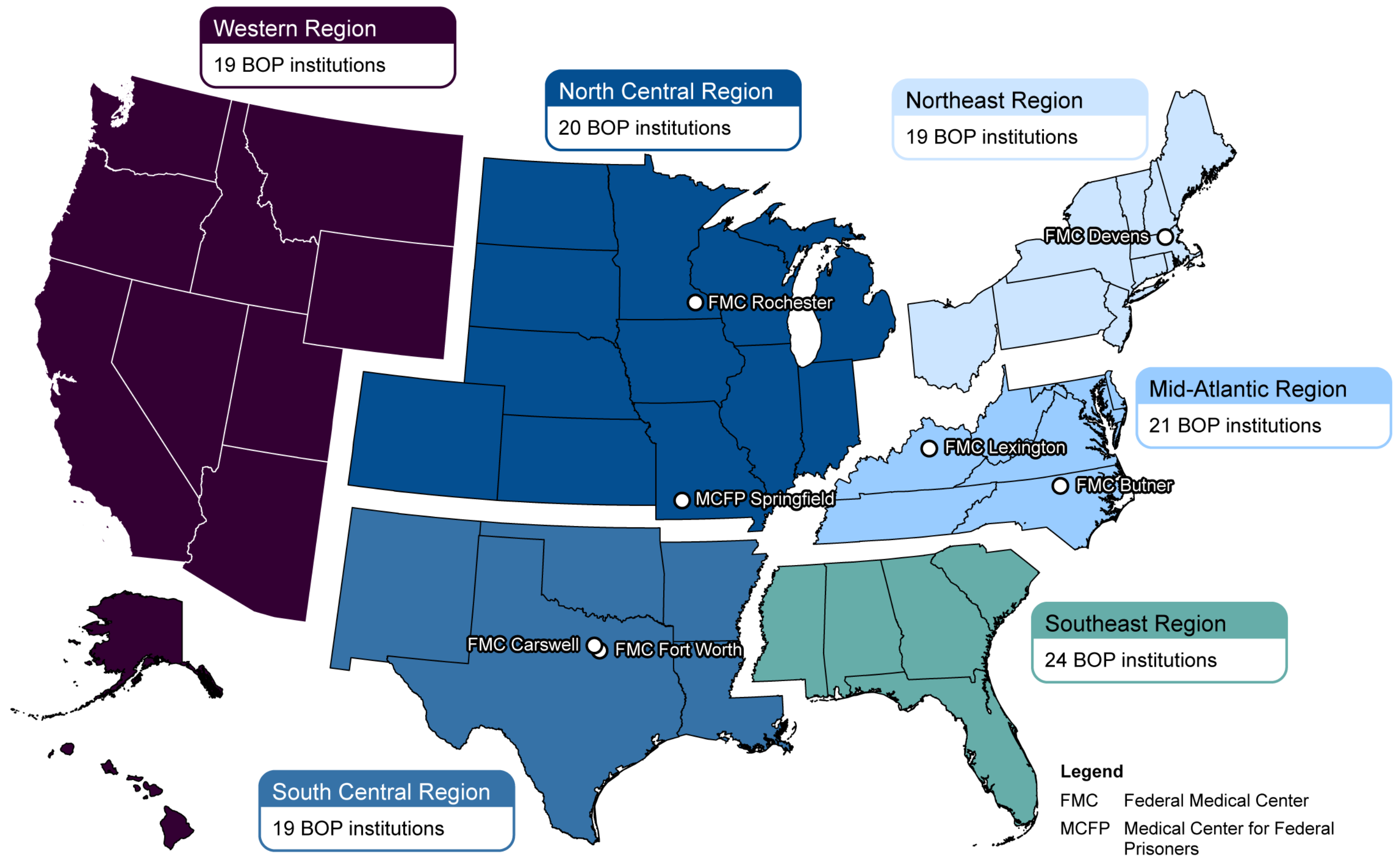
As of June 2017, BOP was responsible for approximately 188,000 inmates in federal custody. About 81 percent, or approximately 154,000 inmates, are housed in BOP-operated institutions.[13] There are 122 BOP-operated institutions, with some of the institutions clustered in a Federal Correctional Complex (FCC).[14] BOP designates 7 of its 122 institutions as medical referral centers, generally called a Federal Medical Center (FMC), to provide advanced care for inmates with more serious chronic or acute medical conditions.[15] Each BOP institution (or complex) is located within one of six regions, with an office overseeing the region (see fig. 1). BOP also has a Central Office, located in Washington, D.C., that oversees the six regions.

[13]BOP also has inmates in privately run facilities and other types of facilities such as Residential Reentry Centers (RRC). We excluded the privately managed facilities from our review as BOP does not track the specific costs for health care provided to inmates housed therein. Rather, BOP uses fixed-price contracts that only require the contractors to provide BOP with their costs on a per inmate per day basis. We also excluded RRCs from our scope as, according to BOP officials, BOP does not cover health care expenses for all inmates housed in RRCs as some inmates receive care through employer-provided insurance or other means.

[14]At FCCs, institutions with different missions (for example, medical/mental health, pretrial, and holdover) and security levels are located in proximity to one another. FCCs could be made up of two institutions, or up to four institutions. In total, there are 15 complexes.

[15]Six of the medical referral centers are named Federal Medical Center (FMC) and one is named United States Medical Center for Federal Prisoners. According to BOP, there is no salient difference in the medical mission for the seven institutions and therefore all can be referred to as FMCs.

Figure 1: Bureau of Prisons' (BOP) Regions, Number of Institutions per Region, and Locations of Federal Medical Centers



Source: GAO analysis of BOP data; Map Resources (map). | GAO-17-379

Note: Six of the medical referral centers are named Federal Medical Center (FMC) and one is named United States Medical Center for Federal Prisoners (MCFP). According to BOP, there is no salient difference in the medical mission for the seven institutions and therefore all can be referred to as FMCs.

Provision of Health Care

BOP is responsible for providing medically necessary medical, dental, and mental health services in a manner consistent with standards of care for the non-prison community.[16] BOP's Health Services Division oversees the provision of medical, dental, and psychiatric services. BOP's Psychology Services Branch, under its Reentry Services Division, is responsible for providing psychology services, including psychology treatment programs and drug abuse treatment programs.[17]

BOP provides most medical and dental care inside its institutions (inside care), usually with BOP-employed medical staff. The level and kinds of services provided depends upon the care level of the institution, as described below. Each BOP institution operates a health services unit. Most units have examination rooms, treatment rooms, dental clinics, radiology and laboratory areas, a pharmacy, and administrative offices, as can be seen in figure 2 below. BOP staffs these health units with medical professionals including physicians, dentists, nurses, pharmacists, and mid-level practitioners.[18] Inside care services include:

- Health screening upon inmates' admission to the prison, comprehensive documentation of inmates' medical history, and physical exams to identify underlying infectious, chronic, and behavioral health needs.
- Sick call triage and episodic visits to assess, diagnose, and treat short-term health problems.
- Preventative health visits to screen for underlying chronic conditions and immunize against transmission of preventable infectious diseases.

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[16]BOP distinguishes between medically necessary acute or emergent care, and medically necessary non-emergent care. Medically necessary acute or emergent care is associated with medical conditions that without care would cause rapid deterioration of health, significant irreversible loss of function, or may be life threatening. Medically necessary non-emergent care is associated with conditions that are not immediately life-threatening but which without care could lead to significant risk of deterioration leading to premature death, reduction in the possibility of repair later without present treatment, and significant pain or discomfort that impacts daily living. See: BOP, *Program Statement: Patient Care*, Number: 6031.04 (June 3, 2014).

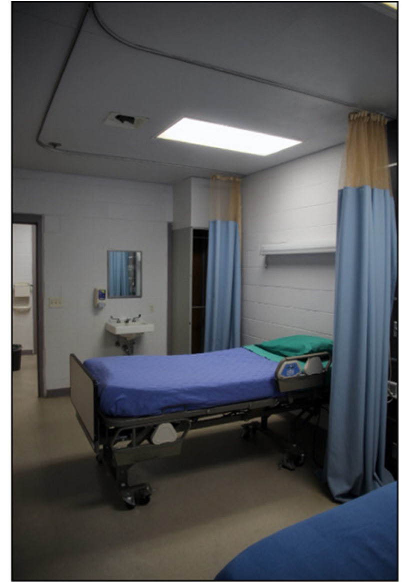
[17]See GAO-13-1.

[18]BOP also contracts with medical providers to offer clinics and specialty services inside the institutions to complement the primary care offered by BOP staff. See: BOP, *Program Statement: Patient Care*, Number: 6031.04 (June 3, 2014).

- Chronic care clinics to manage long-term diseases, such as diabetes, asthma, and congestive heart failure.
- Rehabilitative care to regain or maintain optimal physical and mental health function.
- Oral health care to assess, diagnose, treat, and prevent dental cavities and oral diseases.

Figure 2: Select Images of Health Services Facilities and Equipment at Bureau of Prisons' (BOP) Institutions

Pharmacy



Long-term Care Room

Dental Examination Room

Optometry Room

Source: BOP. | GAO-17-379

Note: These images represent various health care facilities at BOP institutions. They are not necessarily reflective of the facilities at all BOP institutions, which may differ based on medical care level and available resources.

When BOP is unable to provide a medical service to an inmate, BOP transports the inmate to a medical facility or provider in the community (outside care). Generally, each BOP institution has its own outside care contract that sets payment rates for services provided with the contracted community medical centers and providers. Further, apart from some national BOP contracts that standardize goods and services,[19] each BOP institution acquires its own health care goods and services. Institution-acquired goods and services vary, and include contracted health care professionals, medical imaging services, such as ultrasound and magnetic resonance imaging, medical equipment, and medical waste disposal.[20]

BOP Institution Care Levels

Beginning the process in 2004, BOP instituted a medical and mental health care level system for its inmates and its institutions. BOP designates inmates as a care level 1, 2, 3, or 4, depending on the level of medical and mental health services required. Inmates designated as a care level 1 are generally considered healthy, and the intensity of care required increases along with care level (see table 1).

[19]According to BOP, examples of national contracts include the purchase of X-ray equipment, pharmaceuticals, and medical/surgical supplies.

[20]BOP relies on contracting for specialty imaging, which could include a computerized tomography (CT) scan or magnetic resonance imaging (MRI). For basic radiographic imaging, over 95 percent of BOP institutions use BOP's teleradiology program.

Table 1: Description of the Medical and Mental Health Care Levels of Bureau of Prisons' (BOP) Inmates

Care level designation	Description	Percentage of inmates at each inmate medical care level (as of March 2017)[a]	Percentage of inmates at each inmate mental care level (as of March 2017)[a]
Care level 1	Medical care level 1 inmates are generally healthy, under 70 years of age, and may have some limited medical needs requiring clinician evaluation and monitoring such as mild asthma or diet-controlled diabetes. Mental care level 1 inmates show no significant level of functional impairment associated with mental illness and demonstrate no need for regular mental health interventions.	69	95
Care level 2	Medical care level 2 inmates are those with stable conditions, requiring at least quarterly clinician evaluation, such as medication-controlled diabetes or emphysema. Mental care level 2 inmates are those requiring routine outpatient mental health care on an ongoing basis and/or need brief, crisis-oriented mental health care of significant intensity.	25	3
Care level 3	Medical care level 3 inmates are fragile outpatients who require frequent clinical contacts, and/or who may require some assistance with activities of daily living. Examples include patients with advanced human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) disease or end-stage liver disease. Mental care level 3 inmates are those that require enhanced outpatient mental health care, such as weekly interventions, or placement in a residential Psychology Treatment Program.[b]	2	<1
Care level 4	Medical care level 4 inmates are severely impaired, and may require daily nursing care, such as patients with cancer in active treatment, dialysis, quadriplegia, and those undergoing or recovering from major surgery. Mental care level 4 inmates are those requiring acute care in a psychiatric hospital.	1	<1

Source: BOP. | GAO-17-379

[a]Percentage does not equal 100 percent as some inmates were still under an initial care level designation—known as screen level—which is made by BOP's Designation and Sentence Computation Center before arrival at a BOP institution. Upon arrival at a BOP institution, BOP staff determines the care level.

[b]Psychology Treatment Programs typically involve standard protocols that all apply to all participants, including residential and non-residential drug treatment programs, sex offender management programs, and other specialized mental health treatment programs.

BOP also classifies its institutions as a care level 1, 2, 3, or 4, depending on the level of medical and mental health services provided (see app. II for a complete list of institutions with their associated medical care levels). As of 2017, BOP has seven care level 4 institutions—FMCs—that offer advanced care, such as dialysis, oncology treatment, limited surgery services, prosthetics, inpatient and forensic mental health, dementia care, and end-of-life care (see app. III for more information on the FMCs).[21]

BOP Electronic Medical Records System

BOP uses an electronic medical records system—the Bureau Electronic Medical Record (BEMR) system—to keep track of an inmate's medical, social, and psychological history. It includes information on an inmate's clinical encounters (for both inside care and outside care) and medication, among other things.[22] According to BOP officials, BEMR differs from typical electronic medical records systems used outside of prison systems, which generally tie a diagnostic code to a reimbursement rate.[23] BOP's system differs because it was designed as a record of clinical care, not a record of managing reimbursements through private insurance companies, Medicare, or Medicaid.

Health Care Planning and Oversight

BOP plans and oversees its provision of health care through various mechanisms; the following are four major mechanisms that effect health care cost control:

- *HSD Executive Staff:* The HSD Assistant Director, Senior Deputy Assistant Director, and Medical Director oversee the programs, operations, and delivery of health care for BOP institutions. They direct the HSD Branch Chiefs and Chief Professional Officers charged with managing national health programs and services. According to

[21]Forensic mental health is the psychological or psychiatric evaluation of pretrial and post-trial inmates pursuant to 18 U.S.C. §§ 4241 – 4247.

[22]An electronic medical records system is defined as an electronic record of health-related information on an individual that can be created, gathered, managed, and consulted by authorized clinicians and staff within one health care organization.

[23]In the United States, every claim submitted by health care providers to health care payers includes International Classification of Diseases (ICD) codes. ICD codes are the standard code set used in the United States documenting medical diagnoses and inpatient procedures.

BOP officials, HSD Executive Staff are the most integral planning mechanism and the final decision-makers on any HSD plan.

- *HSD Governing Board:* BOP established this multi-divisional and multi-regional governance structure in 2005 to provide executive level strategic planning and performance evaluation of health services management and operations. Generally, the Board is responsible for overseeing the planning, organization, delivery, and evaluation of health services provided within BOP institutions by BOP staff and contractors. The Board is also tasked with working with HSD to ensure that medically necessary health care is delivered in the most cost-efficient way.
- *The BOP-Wide Annual Strategic Plan:* BOP develops an annual strategic plan to help fulfill its mission and achieve strategic goals. BOP highlights cost-efficiency in several parts of its annual strategic plan, including its mission and vision statements. BOP's mission statement states that BOP institutions will be cost efficient and BOP's vision statement states that it aims to be the best value provider of efficient correctional services and programs. BOP developed strategic objectives, including a strategic objective focused on health care efficiencies, which BOP explains as "maximizing health care resources as a cost-containment strategy by applying evidence-based business practices and measuring performance through the use of appropriate industry-wide metrics."
- *The HSD Integrated Strategic Plan for 2015 through 2019:* HSD also has an internal five-year strategic plan for the division that focuses on HSD initiatives that are intended to bring large-scale change to BOP's health care system. HSD established four overarching focus areas in the plan: (1) administration and program management, (2) health services staffing and management, (3) financial management, and (4) risk management.[24] The HSD integrated strategic plan includes a description, implementation strategies, and expected outcomes for all

[24]The corresponding goal for each overarching focus area is as follows—(1) Administration and Program Management: To provide effective oversight of Health Services programs, while leveraging the Agency's human capital and technology resources to maximize operational efficiencies and innovate best practices; (2) Health Services Staffing and Management: To build and hire a fully capable and committed workforce by providing meaningful challenges and continuous career development; (3) Financial Management: To effectively manage the Health Services budget through an ongoing analysis of staffing, program efficiencies, and utilization of services to identify opportunities for cost containment presently and in the years ahead; and (4) Risk Management: To identify and mitigate Health Services system vulnerabilities that may jeopardize patient or worker safety.

four focus areas for each of the 17 HSD branches and sections listed in the plan.

BOP Obligated More Than $9 Billion for Inmate Health Care From Fiscal Years 2009 through 2016 and Several Factors Affected Costs

BOP's Annual Health Care Obligations Have Increased Overall and on a Per Capita Basis

During the 8-year period starting in fiscal year 2009 and ending in fiscal year 2016, BOP obligated more than $9 billion for the provision of inmate health care. According to BOP data, annual obligations increased from a total of almost $978 million in fiscal year 2009 to more than $1.3 billion in fiscal year 2016, an increase of about 37 percent overall during this period (see table 2). More specifically, annual obligations for medical services[25] increased by about 37 percent, psychology services by about 39 percent, and drug abuse treatment programs by almost 44 percent.[26]

[25]Medical services obligations as reported by BOP include medical staff salaries and expenses, medical supplies, pharmaceutical costs, and costs of treating inmates outside of BOP institutions, including overtime costs paid to correctional officers transporting inmates.

[26]Pursuant to 18 U.S.C. § 3621(e), BOP is required to make available appropriate substance abuse treatment for each prisoner the BOP determines has a treatable condition of substance addiction or abuse, including the provision of residential substance abuse treatment for all eligible prisoners (and make arrangements for appropriate aftercare), subject to the availability of appropriations.

Table 2: Total Obligations for Inmate Health Care, Population, Per Capita Obligations, and Inflation Adjusted Per Capita Obligations in Bureau of Prisons (BOP) Institutions from Fiscal Years 2009 through 2016

(Total obligations are in millions of dollars; inmate population and obligations per capita are actual numbers; percentage change is in percent)

	Fiscal year							
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Medical services[a]	$865.2	$914.3	$955.3	$991.0	$1,061.9	$1,096.8	$1,146.7	$1,186.9
Psychology services	$44.7	$47.3	$49.7	$51.6	$52.4	$55.3	$59.4	$62.3
Drug abuse treatment programs	$58.5	$64.1	$66.8	$69.8	$75.9	$79.2	$81.7	$84.0
Sex Offender Management Programs	$6.9	$6.9	$6.6	$7.2	$7.9	$8.7	$9.2	$8.3
Medical staff training	$2.6	$2.5	$2.6	$2.7	$1.8	$3.2	$2.2	$2.7
Total actual health care obligations	**$977.9**	**$1,035.0**	**$1,081.1**	**$1,122.3**	**$1,199.9**	**$1,243.3**	**$1,299.2**	**$1,344.2**
Inmate population at end of fiscal year	172,000	172,747	177,368	176,909	176,410	171,868	164,853	156,266
Total annual per capita obligations	$5,686	$5,992	$6,095	$6,344	$6,802	$7,234	$7,881	$8,602
Total annual per capita obligations adjusted for inflation (2016 dollars)	**$6,334**	**$6,495**	**$6,485**	**$6,627**	**$6,998**	**$7,350**	**$7,958**	**$8,602**
Percentage change in inflation-adjusted per capita obligations from prior fiscal year	-	2.5	-0.2	2.2	5.6	5.0	8.3	8.1

Source: GAO analysis of BOP data. | GAO-17-379

Note: Numbers may not total because of rounding.

[a]Medical services obligations as reported by BOP include medical staff salaries and expenses, medical supplies, pharmaceutical costs, and costs of treating inmates outside of BOP institutions, including overtime costs paid to correctional officers transporting inmates.

As shown in table 2, medical services obligations have been increasing over time. Psychology services and drug abuse treatment programs obligations have also been increasing over time. According to BOP officials, more recent increases in psychology services obligations can be attributed to an effort to fill vacancies in psychology services positions throughout BOP institutions. BOP also issued a new program statement in 2014 on the treatment and care of inmates with mental illness, which increased the treatment requirements and necessitated hiring more staff,

according to BOP officials.[27] BOP officials also explained that more recent increases in drug abuse treatment program obligations were due to BOP adding 18 additional Residential Drug Abuse Programs (RDAP), including some specialized RDAP, beginning in fiscal year 2013. For example, BOP added four RDAPs in high security institutions, and three Spanish-language RDAPs. Sex Offender Management Programs and medical staff training remained fairly constant during this time.

To account for any possible increases in health care obligations as a result of changes in the inmate population,[28] we estimated the annual per capita, or per inmate obligations, by dividing the total health care obligations by the number of inmates—and this figure also increased over time, as can be seen in table 2. After adjusting for inflation, per capita health care obligations increased from $6,334 per inmate in fiscal year 2009 to $8,602 per inmate in fiscal year 2016, or an increase of about 36 percent during this time period.[29] As table 2 shows, most of the growth in inflation adjusted per capita obligations occurred in the last four years of fiscal years 2013 through 2016.

Of the five categories we list for total health care obligations (medical services, psychology services, drug treatment programs, Sex Offender Management Programs, and medical staff training) medical services comprised the largest amount, about 88 percent. BOP-reported medical services obligations include several categories of expenditures, which we separated into outside medical services and inside medical services, the latter of which we grouped into five major categories.[30] We analyzed these categories and found that for fiscal year 2016, about 37 percent

[27]BOP, *Program Statement: Treatment and Care of Inmates with Mental Illness*, Number 5310.16 (May 1, 2014).

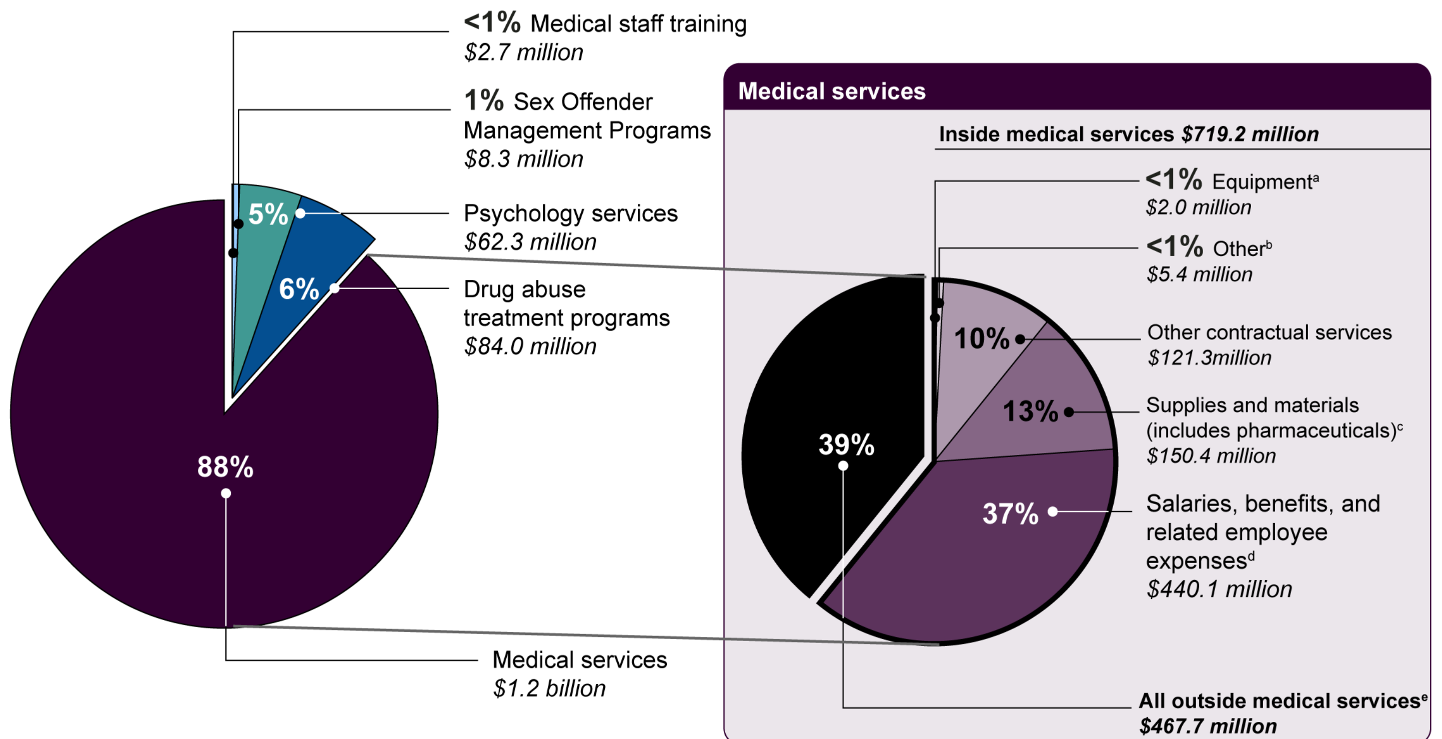
[28]Between 1980 and 2013, BOP's prison population increased by almost 800 percent. Since 2013, the prison population had begun to decline due to several significant efforts to recalibrate federal sentencing policy, including the retroactive application of revised drug sentencing guidelines, and new charging policies for low-level, non-violent drug offenders. See GAO, *Federal Prison System: Justice Could Better Measure Progress Addressing Incarceration Challenges*, GAO-15-454 (Washington, D.C.: July 19, 2015).

[29]We adjusted the per capita obligations by adjusting every year to 2016 dollars. Before adjusting for inflation, per capita health care obligations increased from $5,686 per inmate in fiscal year 2009 to $8,602 per inmate in fiscal year 2016, or an increase of about 51 percent.

[30]Those categories were: salaries, benefits, and related employee expenses; other contractual services; supplies and materials (which includes pharmaceuticals); equipment; and other.

were for medical staff labor costs inside BOP institutions and 39 percent were for outside medical services, as illustrated in figure 3. Outside medical services costs include costs to treat inmates at private physicians' offices or at hospitals, as well as transportation costs. These costs include security related costs, including overtime costs for correctional officers to transport the inmates to those locations, as well as for their time guarding inmates, based on inmates' custody levels, when inmates are hospitalized. According to BOP, in fiscal years 2015 and 2016, security related costs made up 19 percent of outside medical services' costs.

Figure 3: Bureau of Prisons' (BOP) Total Health Care Obligations Components, and Total Medical Services Obligations Components for Fiscal Year 2016



Source: GAO analysis of BOP data. | GAO-17-379

Note: Numbers may not total because of rounding.

[a]Equipment includes the purchase of personal property of a durable nature. According to BOP officials, under medical services obligations this includes equipment such as X-ray machines, medication dispensing systems, stretchers, telehealth units and peripherals, cardiac monitors/defibrillators, and mini-ambulance carts.

[b]Other includes transportation of items, rent, communications, and utilities, printing and reproduction, grants, subsidies and contributions, and insurance claims.

[c]Supplies and materials include commodities acquired by formal contract or other form of purchase that are ordinarily consumed or expended within one year after they are put to use, converted in the process of construction, or used to form a minor part of equipment. Examples include office supplies, chemicals, surgical and medical supplies, and cleaning supplies. In the case of medical services obligations, the majority of this category is made up of pharmaceuticals.

[d]Salaries, benefits, and related employee expenses include gross compensation for medical staff employed by BOP and the Commissioned Corps Officers of the U.S. Public Health Services (PHS); including paid leave, overtime pay, and holiday pay; benefits such as health and life insurance; and obligations for transportation, per diem, and travel expenses for medical staff while on official duty. PHS is an agency under the Department of Health and Human Services that provides public health services to underserved and vulnerable populations. BOP is responsible for PHS staff working in BOP institutions.

[e]Outside medical services costs include costs to treat inmates at private physicians' offices or at hospitals, as well as transportation costs. These costs include security related costs, including overtime costs for correctional officers to transport the inmates to those locations, as well as for their time guarding inmates, based on inmates' custody levels, when inmates are hospitalized.

At the same time that BOP's health care obligations have been increasing, total United States health care expenditures has also been increasing.[31] According to the Department of Health and Human Services National Health Expenditure Accounts (NHEA) data,[32] total health care expenditures in the United States increased by 5.8 percent in fiscal year 2015, and reached a per capita expenditure of $9,990.[33] However, as we show in table 3, growth in expenditures, while increasing every year, has not increased consistently, with the last three fiscal years of 2014 through

[31]Expenditures are the actual spending of money. This is different from an obligation, which is a definite commitment that creates a legal liability of the government for the payment of goods and services received.

[32]The U.S. Department of Health and Human Services has published an annual series of data presenting total health expenditures since 1964. The Department completes these estimates with the goal of measuring the total annual dollar amount of health care consumption in the U.S., as well as the dollar amount invested in the medical sector structures and equipment and non-commercial research to procure health services in the future.

[33]National health expenditures (NHE) include, among others, hospital care; physician and clinical services; mental health practitioner services; dental services; other health, residential, and personal care services; home health care; prescription drugs; durable medical equipment; nursing care; and substance abuse facilities. While not directly comparable to health care services in a prison setting, NHE includes most of the same kinds of expenses that are incurred by BOP, such as costs of medical professionals' services and pharmaceuticals.

2016 increasing at a higher rate.[34] Table 3 also shows the per capita expenditures, which have increased every year over the 8-year time period.

Table 3: National Health Expenditure Increases and Per Capita Expenditures from Calendar Year 2009 through 2016

(Annual growth in percentage and per capita expenditures in actual dollars)

	Calendar year							
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016[a]**
National health expenditures annual percentage growth	4.0	4.1	3.5	4.0	2.9	5.3	5.8	4.8
National health expenditures per capita	$8,141	$8,404	$8,638	$8,915	$9,110	$9,515	$9,990	$10,372

Source: U.S. Department of Health and Human Services. | GAO-17-379

[a]As of May 2017, national health expenditure figures for 2016 are projections rather than actual figures.

National health expenditures are not directly comparable to BOP's costs because the inmate population is predominantly adult and male, unlike the overall U.S. population. Nevertheless both national health expenditures and BOP health care costs have risen at a higher rate in the last three years.

Various Factors Affected BOP's Health Care Costs

We spoke with numerous BOP officials at the institutional, regional, and Central Office levels to discuss the factors that affected inmate health care costs. Officials frequently cited the following as major factors:

- inmates entering with relatively poorer health,
- aging inmates,

[34]Higher growth rates in 2014 were primarily due to expansion of private health insurance and Medicaid coverage under the Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010), and to the rapid growth in drug expenditures, including the introduction of new hepatitis C drugs. Higher growth rates in 2015 were due to accelerated growth in spending for private health insurance, hospital care, and physician and clinical services. See: Health Affairs, Anne B. Martin, Micah Hartman, Joseph Benson, Aaron Catlin, and the National Health Expenditure Accounts Team, *National Health Spending in 2014: Faster Growth Driven by Coverage Expansion and Prescription Drug Spending*. Health Affairs published online Dec. 2, 2015, and Anne B. Martin, Micah Hartman, Benjamin Washington, Aaron Catlin, and the National Health Expenditure Accounts Team, *National Health Spending: Faster Growth in 2015 As Coverage Expands And Utilization Increases*. Health Affairs published online Dec. 2, 2016.

- rising pharmaceutical prices, and
- outside medical services.

Inmates entering with relatively poorer health—BOP officials stated that inmates are a unique population that poses health care challenges. For example, officials stated that inmates come into the system with more acute needs from limited access to health care or they have engaged in risky behaviors, such as substance abuse. Inmates also tend to have higher rates of infectious diseases and chronic conditions that can persist throughout incarceration. According to the Council of State Governments Justice Center, rates of mental illness, substance use disorders, infectious disease, and chronic health conditions are as much as seven times higher for inmates than rates in the general population.[35]

Aging inmates—BOP officials stated that an aging inmate population affects health care costs. In a 2015 report, the DOJ OIG also found that aging inmates are more costly to incarcerate than younger inmates due to increased medical needs.[36] BOP data show that the average age of inmates has increased from fiscal year 2009 through 2016, as has the percentage of inmates aged 55 years or older.[37] As seen in table 4, the percentage of inmates aged 55 years or older increased from 8.4 percent of the population in fiscal year 2009 to 12.0 percent in fiscal year 2016, which is an increase of about 44 percent during this time period.

[35]Council of State Governments Justice Center, *Medicaid and Financing Health Care for Individuals Involved with the Criminal Justice System*, (New York: Dec. 2013). The Council of State Governments Justice Center is a national nonprofit organization that serves policymakers at the local, state, and federal levels from all branches of government.

[36]DOJ OIG, *The Impact of an Aging Inmate Population on the Federal Bureau of Prisons*, Evaluations and Inspections Division 15-05 (Washington, D.C.: May 2015).

[37]While there is no consensus on what cutoff age is appropriate to be considered an aging inmate, correctional health experts typically define the prison population as “older” at the age of 50 or 55 because inmates generally experience health problems related to aging at a younger age than non-incarcerated people. For the purposes of our report, we are defining “aging inmate” as 55 years of age or older.

Table 4: Percentage Aged 55 and Older, and Average Age of Inmates in Bureau of Prisons (BOP) Institutions from Fiscal Years 2009 through 2016

	Fiscal year							
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Percentage of inmates aged 55 years and older	8.4	8.8	9.3	9.9	10.4	11.0	11.6	12.0
Average inmate age	38.2	38.6	38.9	39.2	39.6	39.9	40.3	40.5

Source: GAO analysis of BOP data. | GAO-17-379

Note: Fiscal years 2009 through 2015 is GAO analysis of BOP provided data but fiscal year 2016 is BOP-generated data.

According to BOP officials, and the 2015 DOJ OIG report, increasing numbers of aging inmates are due to (1) inmates entering the system for the first time at older ages, and (2) inmates aging over time while incarcerated and serving long sentences.[38]

Rising Pharmaceutical Prices—According to BOP officials, and data we reviewed, expenditures for pharmaceuticals have risen from fiscal years 2009 through 2016. As table 5 shows, BOP's total pharmaceutical expenditures have increased from $61.4 million in fiscal year 2009 to $111.7 million in fiscal year 2016, or an increase of about 82 percent. Accounting for changes in inmate population over this time period, we found that per capita expenditures have also increased, even in years when population fell. Adjusting for inflation, and using 2016 dollars, we found that overall per capita expenditures increased from $443 per inmate in fiscal year 2009 to $715 in fiscal year 2016, or an increase of about 61 percent.[39]

[38]DOJ OIG 15-05.

[39]Before adjusting for inflation, per capita pharmaceutical obligations increased from $357 per inmate in fiscal year 2009 to $715 per inmate in fiscal year 2016, or an increase of just over 100 percent.

Table 5: Bureau of Prisons' (BOP) Pharmaceutical Expenditures Adjusted for Population and Inflation from Fiscal Years 2009 through 2016

(Expenditures are in millions of dollars, per capita expenditures are in actual dollars, and percentage change is in percent)

	Fiscal year							
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Total pharmaceutical expenditures	**$61.4**	**$64.2**	**$67.0**	**$74.1**	**$79.5**	**$89.9**	**$102.3**	**$111.7**
Inmate population at end of the fiscal year	172,000	172,747	177,368	176,909	176,410	171,868	164,853	156,266
Per capita real pharmaceutical expenditures	$357	$371	$378	$419	$451	$523	$621	$715
Per capita pharmaceutical expenditures adjusted for inflation (in 2016 $)	**$443**	**$445**	**$437**	**$469**	**$499**	**$566**	**$647**	**$715**
Percentage change in inflation-adjusted per capita pharmaceutical expenditures	-	0.4	-1.7	7.3	6.4	13.4	14.4	10.4

Source: GAO analysis of BOP data. | GAO-17-379

According to BOP officials, new advances in certain medications—in particular hepatitis C medication, HIV/AIDS medication, and biologics to treat cancers—have contributed to this increase.[40] For example, the Food and Drug Administration (FDA) approved two new medications in a new class of hepatitis C drugs in May 2011, which significantly increased the cost of treating hepatitis C-infected inmates. As we show in table 6, BOP's hepatitis C medication expenditures increased by almost 132 percent from fiscal year 2011 to 2012. FDA approved additional new medications at the end of 2013 and in 2014 that essentially cure hepatitis C, but that also drove up BOP's treatment costs. As these latest medications became the standard of care for treating hepatitis C, BOP was therefore required to use them. Table 6 also shows that BOP experienced an increase in hepatitis C medication expenditures of about 136 percent from fiscal year 2014 to 2015. Overall, BOP experienced an increase of about 427 percent for hepatitis C medication during the 8-year

[40]Biological products include a wide range of products such as vaccines, blood and blood components, allergenics, somatic cells, gene therapy, tissues, and recombinant therapeutic proteins. In contrast to most drugs that are chemically synthesized and their structure is known, most biologics are complex mixtures that are not easily identified or characterized.

time period.[41] According to BOP officials, the average cost to treat one inmate with the new medication ranges from $30,000 to $60,000. BOP treated 240 inmates in fiscal year 2015 and 327 inmates in fiscal year 2016 with the new medications. Additionally, according to BOP's 2018 Congressional Budget Justification, BOP estimated that there were approximately 20,000 inmates infected with hepatitis C, most of whom had not been treated. Table 6 also shows increases in expenditures for medication to treat cancer and HIV/AIDS. Overall, expenditures for cancer medication increased by about 315 percent during the 8 year time period, and by about 87 percent for HIV/AIDS medication.

[41]The Department of Veterans Affairs (VA) has also experienced these types of increases to treat hepatitis C, as our prior work has shown. See for example: GAO, *VA's Health Care Budget: In Response to a Projected Funding Gap in Fiscal Year 2015, VA Has Made Efforts to Better Manage Future Budgets*, GAO-16-584 (Washington, D.C.: June 3, 2016), and *VA's Health Care Budget: Preliminary Observations on Efforts to Improve Tracking of Obligations and Projected Utilization*, GAO-16-374T (Washington, D.C.: Feb. 10, 2016).

Table 6: Bureau of Prisons' (BOP) Pharmaceutical Expenditures for Hepatitis C, Cancer, HIV/AIDS, and Psychotropic Drugs and Percentage Change from Fiscal Years 2009 through 2016

(Expenditures in millions of dollars, and percentage change in percentage)

	Fiscal year							
	2009	2010	2011	2012	2013	2014	2015	2016
Hepatitis C medication expenditures	$2.6	$2.0	$1.9	$4.5	$4.2	$5.3	$12.6	$13.6
Hepatitis C medication percentage change from previous year	-	-24.6	-1.2	131.9	-6.4	27.1	136.3	8.7
Cancer medication expenditures	$1.9	$1.6	$2.1	$4.1	$3.7	$5.9	$6.4	$7.9
Cancer medication percentage change from previous year	-	-15.1	32.0	92.6	-10.4	60.3	7.8	24.3
HIV/AIDS medication expenditures	$14.6	$14.5	$16.1	$19.0	$20.1	$23.2	$25.1	$27.4
HIV/AIDS medication percentage change from previous year	-	-0.9	11.0	17.7	6.0	15.4	8.1	9.3
Psychotropic medication expenditures	$10.6	$10.2	$8.0	$7.0	$6.3	$4.2	$3.8	$2.7
Psychotropic medication percentage change from previous year	-	-2.9	-21.8	-12.2	-9.8	-33.1	-9.5	-29.1

Source: GAO analysis of BOP data. | GAO-17-379

Note: These expenditures are based on BOP's annual list of top 50 medication expenditures and do not encompass the totality of expenditures on medications. On average, the top 50 medications make up about 67 percent of total pharmaceutical expenditures.

To ensure appropriate management of the hepatitis C infected inmate population, BOP developed treatment criteria, consistent with the American Association for the Study of Liver Diseases guidelines, to expediently identify and treat inmates with the highest medical need.[42] In addition, the BOP Chief Pharmacist and other officials told us that they seek opportunities to acquire voluntary price reductions below the

[42]The American Association for the Study of Liver Diseases (AASLD) is the leading organization of scientists and health care professionals committed to preventing and curing liver disease. AASLD develops evidence-based guidelines, which include recommendations of preferred approaches to the diagnostic, therapeutic, and preventative aspects of care related to liver disease.

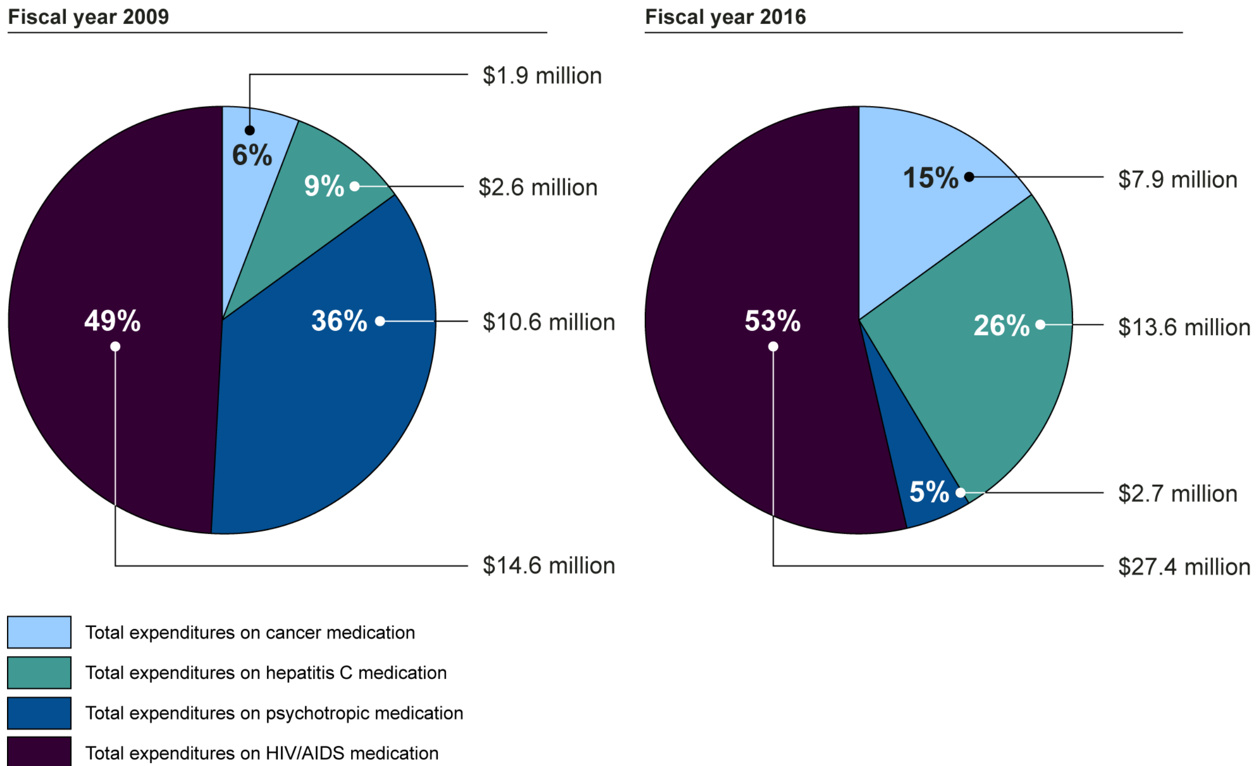
statutory Federal Supply Schedule pricing for hepatitis C medication from drug manufacturers.[43]

BOP data show that while pharmaceutical expenditures have increased overall, pharmaceutical expenditures for certain categories have varied, as can be seen in table 6 and figure 4. Expenditures have increased for hepatitis C, cancer, and HIV/AIDS medication, but decreased for psychotropic medications, which are generally used to treat mental health conditions. According to BOP officials, the availability of generic equivalents has helped decrease costs of psychotropic medication. Our prior work has also shown that generic drug prices have fallen overall since 2010, despite some extraordinary price increases in some generic medications.[44]

[43]The Federal Supply Schedules (FSS) program, managed by the General Services Administration, provides federal agencies a simplified method of purchasing commercial products and services at prices associated with volume buying. A schedule is a set of contracts awarded to multiple vendors that provide similar products and services. BOP seeks price reductions to obtain a price lower than the FSS price, in accordance with Federal Acquisition Regulation 8.405-4, 48 C.F.R. § 8.405-4.

[44]See for example, GAO, *Generic Drugs Under Medicare: Part D Generic Drug Prices Declined Overall, but Some Had Extraordinary Price Increases*, GAO-16-706 (Washington, D.C.: Aug. 12, 2016), and *Prescription Drugs: Trends in Usual and Customary Prices for Commonly Used Drugs*, GAO-11-306R (Washington, D.C.: Feb. 10, 2011). Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, *Understanding Recent Trends in Generic Drug Prices* (Washington, D.C.: Jan. 27, 2016).

Figure 4: Change in Composition of Bureau of Prisons' (BOP) Expenditures for Hepatitis C, Cancer, HIV/AIDS, and Psychotropic Medication from Fiscal Years 2009 to 2016



Source: GAO analysis of BOP data. | GAO-17-379

Notes: Numbers may not total because of rounding.

These expenditures are based on BOP's annual list of top 50 medication expenditures and do not encompass the totality of expenditures on medications. On average, the top 50 medications make up about 67 percent of total pharmaceutical expenditures.

Outside Medical Services—BOP officials told us that costs for outside medical services have risen, which is another factor that is likely affecting their total obligations. According to BOP data, the total amount obligated increased from $322.6 million in fiscal year 2009 to $456.7 million in fiscal year 2016 (see table 7), which is an increase of about 45 percent over this period.

Table 7: Bureau of Prisons' (BOP) Outside Medical Services Obligations from Fiscal Years 2009 through 2016 (in millions of dollars)

	Fiscal year							
	2009	2010	2011	2012	2013	2014	2015	2016
Outside medical services[a]	$322.6	$355.2	$366.1	$382.7	$419.9	$433.9	$453.2	$467.7
Percentage change from previous year	-	10.1	3.1	4.5	9.7	3.3	4.4	3.2

Source: GAO analysis of BOP data. | GAO-17-379

[a]Outside medical services include obligations for contractual services related to the provision of health care.

As previously discussed, BOP incurs costs for outside care when BOP staff take inmates outside for specialty care that cannot be provided inside the institution, or for acute or emergency care, which could potentially become a catastrophic case.[45] We asked BOP for the catastrophic care cost data for the 6 regions, for fiscal years 2014 and 2015. BOP was able to provide us the data for five of six regions for fiscal year 2015, and provided incomplete data for 2014 for most regions. When we asked one region why the data were incomplete, we were told that there was no requirement to collect such data. Although these data are incomplete, they show that BOP estimated costs of at least $100 million in fiscal year 2015 for catastrophic care in 5 of its 6 regions, which represents about 22 percent of outside medical services obligations for 2015. In its Congressional Budget Justifications from fiscal years 2009 through 2016, BOP reported that it had developed a process for monitoring and tracking catastrophic care costs; however, BOP officials acknowledged that their efforts to date have not been successful. During the course of our review, BOP designed a data collection instrument, which BOP officials stated they distributed to the regional offices, in order to more uniformly collect catastrophic care data moving forward.

Outside medical services made up about 40 percent of medical services obligations annually from fiscal years 2009 through 2016. According to BOP officials, BOP has difficulties attracting sufficient medical staff to care for inmates in-house for institutions in remote locations, and

[45]BOP defines a catastrophic case as an event where an inmate in a medical care level 1, 2, or 3 institution incurs outside care costs of $35,000 or more, in conjunction with one of these three events: requires a hospital stay of 7 days or more; has a hospital readmission within 30 days of discharge for the same diagnosis; or has a recurring medical need such as dialysis for kidney failure.

therefore relies on outside care to a greater extent in these locations. We have also reported that BOP finds it particularly challenging to hire medical staff for institutions in rural locations because of the institutions' location and low pay in these areas.[46] In addition to the challenges posed by rural locations, some BOP institutions also have fewer community health care resources in proximity. As shown in figure 5, we found that of the 98 BOP institutions, 64 of them have five or fewer hospitals within a 20 mile radius, and 9 had no hospitals within a 20 mile radius.[47] BOP officials also noted that the existence of a hospital in proximity to a BOP institution does not guarantee the hospital is willing to contract with BOP to serve an inmate population.[48] A DOJ OIG report found that in one BOP complex, a decline in staffing from fiscal year 2010 to fiscal year 2014 corresponded with an increase in outside medical services costs of 47 percent during the same period.[49] According to BOP officials, this is the primary reason BOP instituted its medical care level classification system, so the level of inmate health needs are matched to locations where community health care resources are sufficient.

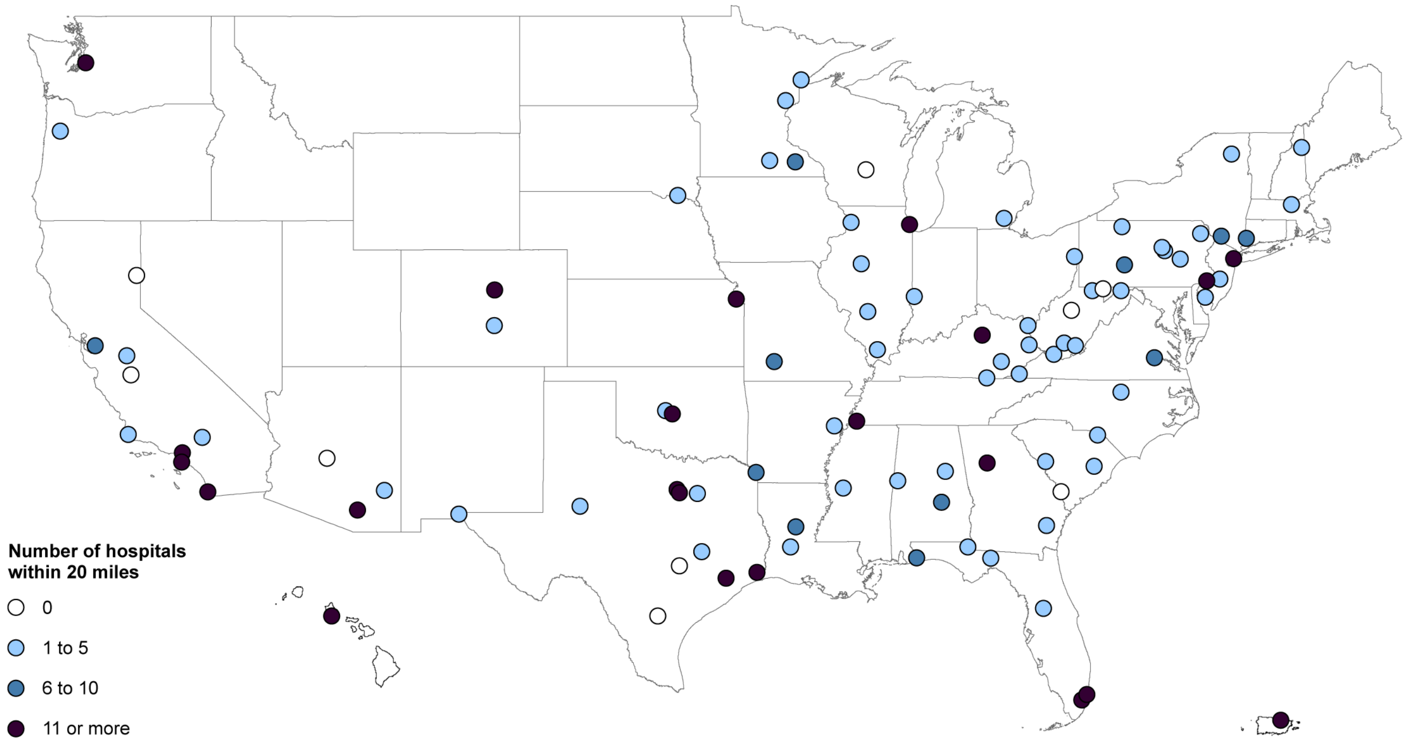
[46]See GAO, *Bureau of Prisons: Management of New Prison Activations Can Be Improved*, GAO-14-709 (Washington, D.C.: Aug. 22, 2014). In this report, we found that BOP was encountering obstacles with hiring sufficient staff during the process of activating institutions, the process by which it prepares them for inmates, and therefore recommended that BOP analyze staffing data at individual institutions in the activation process to assess their progress toward reaching authorized staffing levels. BOP implemented this recommendation by September 2016.

[47]BOP has 122 BOP-operated institutions, 39 of which are located in one of 15 FCCs. FCCs are a cluster of institutions with different missions (for example, medical/mental health, pretrial, and holdover), which are located together. Because they are located together, for the purposes of this analysis we counted an FCC as one institution. When counting an FCC as one institution, there are 98 BOP institutions. We used 98 BOP institutions as the total number of institutions for our analysis.

[48]BOP officials stated that hospitals are not obligated to enter into contractual arrangements with BOP and some refuse due to concerns, such as not wanting inmates in their waiting rooms or entering through their front doors.

[49]DOJ OIG, *Review of the Federal Bureau of Prisons' Medical Staffing Challenges*, Evaluations and Inspections Division 16-02 (Washington, D.C.: March 2016).

Figure 5: Bureau of Prisons' (BOP) Institutions and Number of Hospitals Within 20 Miles



Source: GAO analysis of BOP data; MapInfo (map). | GAO-17-379

BOP Lacks or Does Not Analyze Certain Health Care Data Necessary to Understand and Control its Costs

BOP Lacks Health Care Utilization Data

BOP lacks data on the health care services it provides to inmates, which is otherwise known as health care utilization data.[50] BOP officials explained that existing data systems, such as the Financial Management Information System (FMIS), the accounting system of record, and BEMR, are not capable of collecting health care utilization data. Specifically, BOP cannot collect any health care utilization data from FMIS, because it is a DOJ-wide system and was not designed to allow DOJ components, such as BOP, to customize it. For example, while FMIS tracks expenditures on categories such as salaries and supplies, it cannot be customized to analyze health care data. BOP officials also said they cannot collect financial data from BEMR because BEMR was not designed to collect such data.

BOP officials acknowledged that health care utilization data is important to understand and control health care costs, but recognized that BOP does not have data on its own use of resources. Officials also told us that BOP's lack of health care utilization data has stalled its implementation of one health care cost control opportunity identified in 2012 that would leverage its volume purchasing power while contracting for medical services. Specifically, BOP is planning to pilot a regional comprehensive medical services contract. However, according to BOP officials, they need to provide information to the potential contractors such as how utilization rates compare across institutions within the region, and across the

[50]Utilization can be measured as the number of services provided to a patient, such as the number of X-rays. More often, however, a variety of procedures and services are of interest, and some measure of "cost" is assigned to each service so that resource intensity can be summed over all provided services.

different regions, in order for potential contractors to build proposals.[51] Because BOP is not positioned to provide utilization data, it cannot move forward with its plans. BOP officials also stated that a lack of data on its utilization of services stifles their ability to evaluate various health care cost control efforts.

Given these limitations, BOP has explored and identified some solutions since 2009 to collect data on its utilization of health care services but has not yet determined how to obtain health care utilization data.[52] Examples include the following:

- In fiscal year 2009, BOP began utilizing a medical claims adjudication services contract through which BOP sought, in part, to gather data on the utilization of health services outside its institutions.[53] While BOP officials stated they intended to eventually cover all BOP institutions under this contract, as of February 2017, only 23 BOP institutions have used the service. BOP officials explained that BOP did not add more institutions to the initial medical claims adjudication contract because the contract ended before it could do so. BOP officials could not explain why more institutions had not utilized the services in the five years preceding the end of the contract, but some regional officials we spoke with, and officials at some of the institutions we visited, said the medical claims adjudication services provided were not cost effective. Senior BOP officials disagreed with the regional officials' statement and said that the services were necessary to verify that medical services invoices were correct. BOP created a solicitation for a new contract in February 2016, and, as of February 2017, BOP was evaluating offers. According to officials, BOP is reviewing several proposals to contract for medical claims adjudication services for all BOP-managed institutions and expects to award the contract in early spring 2017.

[51]Generally, each BOP institution has its own contract for outside medical services. Under the proposed regional pilot, BOP would award a single regional comprehensive medical services contract to cover health care for all BOP institutions in one region. This could save the agency $30 million per year, according to internal BOP documents. However, BOP did not have any documentation of the analysis underlying this estimate.

[52]GAO did not evaluate the solutions BOP described to determine whether they would achieve BOP's objectives.

[53]The primary objective of medical claims adjudication was to ensure compliance with the applicable negotiated fee schedule for medical services. BOP requires that its medical claims adjudication services provider also make data available on a periodic and as needed basis.

- In fiscal year 2016, BOP contracted for a study to consider various options to enhance its ability to collect and analyze data through BEMR, including data on utilization of health care services inside and outside BOP's institutions. The study considered three options—keeping the existing system as is, enhancing the existing system, or replacing the system entirely. The study included costs and recommendations for BOP to consider. As of February 2017, BOP officials indicated that they are still exploring these options.
- In fiscal year 2016, to provide potential vendors with utilization data to pilot the regional comprehensive health care contract, as described earlier, BOP began searching for computer software to convert its paper claims for outside medical services into electronic format files. Such files would include the inmate's description, the condition for treatment, the service provided, and the cost of treatment. As of February 2017, BOP officials had not yet identified any cost-effective solutions through which to convert paper claims but said they continue to pursue this option.

In fiscal year 2016, BOP officials also attempted to devise a method to collect health care utilization data from each of its institutions; however, they did not implement this approach after receiving feedback from institution-based personnel that it would be too burdensome on them to implement. As of February 2017, according to officials, BOP continues to explore options to collect and analyze utilization data based on the experiences of other health care systems. For example, BOP convened a federal interagency group to discuss how other federal agencies study utilization rates and discussed with officials from the California Department of Corrections the approach those officials have taken.

BOP officials recognize the importance of finding a solution to collect utilization data and has identified, and in some cases attempted then abandoned, various possible solutions. However, BOP officials told us that they were not aware of OMB guidance on how to conduct a cost-effectiveness analysis, which describes how to systematically evaluate options, and would review it as they continue to pursue a solution to BOP's lack of utilization data.[54] OMB Circular A-94 calls for conducting a cost-effectiveness analysis when the benefits from competing alternatives

[54]OMB defines cost-effectiveness as a systematic quantitative method for comparing the costs of alternative means of achieving the same stream of benefits or a given objective. OMB, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*, Circular No. A-94 (Washington, D.C.: Oct. 29, 1992).

are the same or where a policy decision has been made that the benefits must be provided.[55] By conducting a cost-effectiveness analysis of the potential ways to obtain health care utilization data, BOP will be better positioned to determine the most cost-effective way to collect such data and to start doing so in a timely manner.

BOP Does Not Analyze Available Health Care Spending Data

BOP has not consistently collected and analyzed its institutions' health care spending data to identify additional cost control opportunities, such as through strategic sourcing. Strategic sourcing is a process that moves an organization away from numerous individual procurements toward a broader, aggregate procurement approach. This broader approach generally begins with an analysis of spending (spend analysis) and the identification of products and services for which a more effective sourcing strategy could be implemented.[56] We have emphasized the importance of conducting a comprehensive spend analysis for strategic sourcing purposes since 2002. The approach provides knowledge about how much is being spent for goods and services, who the buyers are, who the suppliers are, and where the opportunities are to save money and improve performance.[57]

BOP officials told us that they do not routinely analyze or review BOP's spending data to identify new opportunities for cost savings through strategic sourcing. BOP procurement officials told us they search for strategic sources for a health care good or service once their colleagues in HSD notify them that BOP needs to obtain the good or service. BOP officials told us it is time intensive to collect and analyze spending data. Nevertheless, they acknowledged the benefits of strategic sourcing and stated they need to seek additional strategic sourcing opportunities. In

[55]OMB, Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*. OMB Circular A-94 provides guidance for cost-effectiveness analyses. Cost-Effectiveness analysis is a less comprehensive technique than a benefit-cost analysis but can be appropriate when considering competing alternatives with the same benefit.

[56]OMB defines strategic sourcing as the collaborative and structured process of critically analyzing an organization's spending and using this information to make business decisions about acquiring commodities and services more effectively and efficiently. OMB, *Memorandum for Chief Acquisition Officers, Chief Financial Officers, and Chief Information Officers on Implementing Strategic Sourcing* (Washington, D.C.: 2005).

[57]GAO, *Strategic Sourcing: Leading Commercial Practices Can Help Federal Agencies Increase Savings When Acquiring Services*, GAO-13-417 (Washington, D.C.: Apr. 15, 2013). See also, *Best Practices: Using Spend Analysis to Help Agencies Take a More Strategic Approach to Procurement*, GAO-04-870 (Washington, D.C.: Sept. 16, 2004).

fiscal year 2013, BOP identified health care supplies/services as a target area for identifying cost savings opportunities that are likely to produce significant savings through strategic sourcing. Further, according to BOP's April 2016 Strategic Sourcing Program guidance, the key to the strategic sourcing program is a thorough analysis of spending patterns—or a spend analysis—to determine what is being purchased, how it is being purchased, the dollar value of those purchases, and which vendors are involved. This guidance is consistent with GAO's prior work on leading commercial practices in strategic sourcing.[58] However, despite this guidance, BOP officials told us that they had not yet reviewed health care spending data and could not identify any BOP official who would have the time to complete the task.

Although BOP has not conducted a spend analysis, it has identified and implemented some strategic sourcing opportunities, such as pursuing national contracts so that all institutions can pay for the same goods or services at the same negotiated rates. When national contracts are not in place, each BOP institution generally procures health care goods and services on an individual basis and some institutions have individually procured the same medical care equipment or services at varied costs. For example, several institutions have either purchased or leased one particular brand of robotic equipment to dispense medication as part of their pharmaceutical operations, but costs for the equipment varied across the institutions—one had an initial purchase cost of about $122,000, while another had an initial annual lease cost that was about $43,000. BOP officials also told us that they identify strategic sourcing opportunities through discussions with other agencies and have participated in interagency collaboration on strategic sourcing.

According to BOP documentation, BOP does not have a single data system that can provide health care spending data for a spend analysis; however, existing sources, such as the Federal Procurement Data System-Next Generation (FPDS-NG), could assist BOP in its data collection effort. For example, BOP records all contracts with estimated values above a certain threshold (currently $3,500) in the FPDS-NG, a database used by agencies across the federal government to record

[58] GAO-13-417.

procurement information.[59] Additionally, according to BOP officials, each institution's business administrators regularly audit spending data from purchase cards—cards used by government agencies to buy goods or services. One BOP region, for example, created a method to monitor its institutions' spending through its local accounting program that helped the region identify opportunities to control costs. Officials found, when they began tracking some aspects of institutional spending, that two institutions within that region were spending $5,000-$10,000 more per year on biohazardous waste disposal than other institutions. As a result, officials from the region contacted the institutions' management and asked them to identify lower cost vendors, which the institutions did. Conducting spend analyses using these existing and readily available data sources could provide BOP with several benefits, including knowledge about how much is being spent for given products and services, who the buyers and suppliers are, and where opportunities exist for BOP to use strategic sourcing to leverage buying and save money.

[59]FPDS-NG can be accessed at https://www.fpds.gov. FPDS-NG data and reporting requirements for FPDS-NG are described in FAR subpart 4.6, 48 C.F.R. subpart 4.6. The micro-purchase threshold became $3,500 in July 2015. 80 Fed. Reg. 38, 293, 38, 294 (July 2, 2015) (codified at 48 C.F.R. § 2.101).

BOP Has Initiatives Aimed to Control Health Care Costs but Has Not Assessed Their Effectiveness, Applied a Sound Planning Approach, or Documented its Analyses of Federal Medical Centers' Missions

BOP Has Initiatives Intended to Control Health Care Costs but Has Not Evaluated Their Effectiveness

BOP-wide Initiatives

BOP has taken bureau-wide actions to help control health care costs through several initiatives, but has generally not evaluated the effectiveness of these initiatives. We reviewed BOP documents to identify initiatives aimed at health care cost control for the period beginning with fiscal year 2009 through November 2016. Through our review and discussions with BOP officials, as of February 2017, we found that BOP had 10 initiatives aimed at controlling its health care costs (see table 8).[60] The table provides a description of each initiative and status.

[60]BOP initially provided several more health care cost control initiatives but BOP officials later determined that only 10 were health care cost control initiatives. BOP officials told us that during the course of this review, they determined that the other initiatives were aimed at clinical care or administrative reporting, rather than cost control.

Table 8: Bureau of Prisons (BOP)-Identified Health Care Costs Savings Initiatives from Fiscal Years (FY) 2009 through February 2017

	Initiative, with year implemented	BOP Description
Implemented		
1.	Pharmaceutical Procurement [2008]	BOP participates in initiatives to leverage the combined purchase requirements with the Department of Veterans Affairs, Department of Defense and Indian Health Service. Additionally the BOP seeks opportunities to acquire voluntary price reductions from manufacturers below statutory Federal Supply Schedule pricing.[a]
2.	Pharmaceuticals Prime Vendor Program [2000]	The Pharmaceuticals Prime Vendor Program enables BOP to leverage high volume purchasing to reduce the individual pricing of select medications.
3.	Contract Dental Lab Operations [2009]	The BOP dental program provides prosthetics to inmate patients that are partially or completely toothless. Dental laboratory services are provided by the national contracted vendor when one is available.
Partially Implemented		
4.	Bill Adjudication (Medical Claims Adjudication) [est. FY2009]	BOP contracts with a medical claims adjudication vendor to review claims for duplicate billing, claims for services not requested or not appropriate for the stated diagnoses, and local market rates for physician and facility charges in 23 BOP institutions (as of February 2017). Contracting for medical claims adjudication enables BOP to identify patterns of fraud, waste, and abuse. BOP plans to fully implement this initiative in its remaining institutions once a new contract is awarded.
5.	National Contracts for Medical Resources [FY2017]	BOP signed an Interagency Agreement with the Department of Veteran Affairs to use its Medical/Surgical Prime Vendor Program, which allows BOP institutions to purchase medical and surgical supplies. According to BOP officials, this initiative is currently in the start-up phase.
6.	Equipment Standardization [FY2017]	BOP's Health Services Division (HSD) is in the process of updating its enterprise Automated Inventory Management System to standardize major medical equipment.
Planned		
7.	Regional Comprehensive Medical Services Contracts [est. implementation in FY2020]	BOP is exploring the feasibility of regional comprehensive medical services contracts that serve a multi-state area. Currently, BOP institutions use separate contracts.
8.	Federal Ceiling Price (Big 4 Pricing) for Pharmaceuticals [est. implementation unknown][b]	BOP is currently not included in the federal law that establishes the Federal Ceiling Price (Big 4 Pricing) for pharmaceuticals. As a result, BOP often pays more for pharmaceuticals than other government agencies. According to BOP officials, BOP is exploring the feasibility of legislation being passed to make Big 4 pricing available to BOP.

	Initiative, with year implemented	BOP Description
	9. BOP Mail Order Pharmacy (BOPMOP) [est. implementation within 5 years]	BOPMOP is an initiative that is to enable remotely located pharmacists to receive automated orders from BOP institutions for dispensing prescribed medications and mailing the packaged medications to the inmate needing pharmaceutical therapy. The remote fill operation will replace the need for hiring/retaining an on-site pharmacist in institutions that house mostly healthy inmates, and provides temporary back-up for institutions experiencing a prolonged absence of an institution pharmacist (e.g., due to an extended illness). BOP officials believe that BOPMOP will maximize pharmacy resources by consolidating storage of prescription drugs into one central inventory and through buying the least expensive brand of generic medications.
Planned		
	10. Unit Dose Repackaging [unknown]	BOP plans to purchase bulk medication, which is generally less expensive than purchasing unit dose packaged items, and repackage them locally or at a central location.

Source: GAO analysis of BOP data. | GAO-17-379

Note: For the purpose of this report, we included initiatives that began prior to fiscal year 2009 if they continued to be implemented during the period of fiscal year 2009 to November 2016.

[a]The Federal Supply Schedules (FSS) program, managed by the General Services Administration, provides federal agencies a simplified method of purchasing commercial products and services at prices associated with volume buying. A schedule is a set of contracts awarded to multiple vendors that provide similar products and services. According to officials, BOP seeks price reductions to obtain a price lower than the FSS price, in accordance with Federal Acquisition Regulation 8.405-4, 48 C.F.R. § 8.405-4.

[b]Federal ceiling prices, also called Big Four prices, are available to the Departments of Veterans Affairs and Defense, the Public Health Service, and the U.S. Coast Guard. These prices are mandated by law to be lower than nonfederal average manufacturer prices.

BOP had also reported six other cost containment initiatives or systems in its fiscal year 2017 Congressional Budget Justification. BOP officials explained that although they had previously publicly reported that these initiatives were designed to contain health care costs, during the course of our review they realized that their primary purpose was instead for clinical or administrative purposes. BOP officials stated that there may be a secondary gain of cost avoidance, but regardless of cost avoidance, they would have carried out the initiatives. BOP reported these cost containment initiatives or systems again in its fiscal year 2018 Congressional Budget Justification (see table 9).

Table 9: Bureau of Prisons (BOP) Health Care Costs Savings Initiatives as Reported in Fiscal Year 2018 Congressional Budget Justification

Initiative, with year implemented	BOP Description
Implemented	
1. Telehealth [2004][a]	BOP uses telehealth for the following: to conduct specialty medicine clinics in some federal medical centers; to deliver specialty medical services to remote locations; to provide psychiatric services and manage psychotropic medications; to consult with institutions on dermatological cases to assess need for community services versus onsite care; to consult with institutions on dietetics and diabetes; to allow regional staff to conduct chronic care visits in their regional institutions; and to facilitate chronic care and follow-up visits across facilities in BOP complexes.
2. Levels of Care [2004]	BOP assigns each inmate and each BOP facility a care level (i.e., care level 1 = essentially healthy; care level 2 = stable chronic conditions; care level 3 = chronic conditions with manageable complications; care level 4 = need for continuous nursing care). BOP reported that this medical classification system enables it to allot its resources to better manage inmates' medical and mental health needs.
3. Utilization Review [2009]	BOP requires every institution to implement a utilization review process to assure that only medically necessary care is provided. Health care staff use an automated utilization review program for clinical decision-making criteria that aims to differentiate between what is medically necessary from what is potentially elective care.
4. Catastrophic Case Management [2012][b]	BOP institutions and regional offices monitor cases of hospitalized inmates and track catastrophic costs to closely manage care and expedite inmate transfers to BOP medical centers when feasible.
5. National Pharmacy & Therapeutics Committee [1996]	BOP's National Pharmacy & Therapeutics Committee researches drug efficacy and safety, and manages a tightly controlled National Drug Formulary that favors generic drugs.[c]
Partially Implemented	
6. Electronic Medical Records System (Health Information Technologies) [FY2008]	BOP-wide deployment of a base electronic medical record was completed in fiscal year 2008. The Bureau Electronic Medical Record system (BEMR) includes the components of the traditional health record, with a prescription component. It utilizes secure wireless technology to bring health care documentation to the patient's bedside on nursing care units and any other area in BOP facilities where care is provided (i.e. special housing units). BOP noted that it planned to integrate a Laboratory Information System that collects information from BOP's medical laboratories with BEMR, continue to refine processes, and add ancillary documentation components in compliance with the Office of the National Coordinator for Health Information Technology's standards.[d]

Source: GAO analysis of BOP data. | GAO-17-379

[a]Telehealth is the use of electronic information and telecommunications technologies to support long distance clinical health care, patient and professional health related education, public health and health administration. See Health Resources and Services Administration "Telehealth."

[b]While BOP institutions and regional offices monitor cases of hospitalized inmates as they occur, BOP Central Office does not systematically track catastrophic care costs over time, and did not require the regions to collect this information. GAO requested BOP's catastrophic data for fiscal years 2014-2015 but the data were incomplete. In 2016, BOP created a template for its regions to collect catastrophic care costs in a more systematic way. This effort remains in progress.

[c]The national formulary is a list of medications that can be prescribed and dispensed by BOP clinicians without additional authorization from higher-level officials. The National Pharmacy & Therapeutics Committee meets regularly to review the national formulary.

[d]The Department of Health and Human Services' Office of the National Coordinator for Health Information Technology is responsible for overseeing the certification of electronic health record (EHR) technology, including establishing EHR technical standards and certification criteria.

Of the 16 initiatives BOP either identified for us (table 8), or reported in its fiscal year 2018 Congressional Budget Justification (table 9), BOP could only provide documentation for 1 cost savings estimate, as we show in table 10. BOP provided documentation demonstrating the analysis for its estimated cost savings for the initiative to contract for its dental lab operations.[61] BOP officials stated that BOP does not have a process to evaluate cost savings and that evaluating all of its initiatives would be very labor intensive. BOP officials also told us that they can sometimes assume cost savings. For example, BOP implemented a system of medical and mental health care levels for its institutions and inmates to match health care needs to health care resources. According to BOP officials, the cost control results of this initiative can be assumed; however, in internal BOP documentation, officials acknowledge that although the system was designed to reduce cost, its results are undetermined. BOP officials stated that BOP does not have an automated data system to collect and analyze cost savings data in this manner.

Table 10: Bureau of Prisons (BOP) Health Care Cost Savings Initiatives with Cost Savings Estimates (Fiscal Year 2009 through November 2016)

	Number of Initiatives	Number of Initiatives with Documented Cost Savings Estimates
Implemented	8	1[a]
Partially Implemented	4	0
Planned	4	0
Total	**16**	**1**

Source: GAO analysis of BOP data. | GAO-17-379

[a]BOP provided documentation for its estimated cost savings for the initiative to transition dental lab operations to an outside vendor.

[61]BOP provided its methodology for estimating cost savings for three planned cost savings initiatives—Federal Ceiling (Big 4) Price, BOPMOP, and Unit Dose Repackaging—but did not provide documentation of analysis to support its cost savings estimate.

BOP had previously developed a process for collecting and analyzing cost data without automated data systems. Specifically, In 2011, in response to a DOJ OIG recommendation, BOP reported to the OIG that it had established a four-step process to collect and analyze data to determine the cost-effectiveness of current and future health care cost control initiatives for which BOP has or can collect data.[62] As part of the process, BOP reported that it would implement the following four steps: (1) generate an initiative for HSD and/or BOP executive staff approval; (2) identify factors to measure an approved initiative's outcomes and establish benchmarks; (3) capture relevant and available program and cost data (to the extent possible using existing data systems) on at least an annual basis; and (4) analyze the data and produce cost-benefit reports for HSD leadership. At that time, BOP listed seven initiatives it could evaluate using this process, and it provided evidence to the OIG that it had used this process to evaluate one of those seven initiatives. As a result, an OIG official told us the OIG closed the recommendation. However, BOP officials told us they have not continued to use this process to determine the cost-effectiveness of its initiatives, and do not have a process in place to determine the cost-effectiveness of its initiatives. When we asked BOP officials about the process, as described to the OIG, they told us that they were unaware of its existence until we inquired about its use. *Standards for Internal Control in the Federal Government* calls for management to design control activities to achieve its objectives, including evaluations to compare actual performance to planned or expected results.[63] By regularly evaluating health care cost control initiatives for which it has or can collect data, BOP would be better positioned to determine if the time and resources it is investing to control costs has been effective, or whether it should alter its path to achieve better outcomes.

Regional and Institutional Initiatives

Some of BOP's regions and institutions have also undertaken various initiatives that officials described as having a cost control impact. BOP officials told us that regions and institutions make decisions about whether and which initiatives to implement based on institutions' varied

[62]U.S. Department of Justice Office of Inspector General, *The Federal Bureau Of Prisons' Efforts To Manage Inmate Health Care*, Audit Division 08-08 (Washington, D.C.: February 2008).

[63]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sep. 10, 2014).

needs and circumstances. For example, BOP encourages institutions to use contract guards, rather than BOP correctional officers, to supervise inmates during treatment in community medical facilities. According to BOP officials from some institutions we visited, the use of contract guards can result in cost savings when compared to overtime costs paid to salaried correctional officers.[64] However, some institution officials told us that security concerns and emergent medical conditions affect their ability to use contract guards. In addition, officials from several of the institutions we visited said they reduce inmate custody and transportation costs by transporting inmates in groups by bus when they require outside health care. An institution's ability to use busing may depend on inmates' medical needs or the willingness of community providers to accommodate several inmates, according to officials.

Additionally, within individual institutions, some BOP officials have developed innovative cost control initiatives. For example, one official in an institution we visited said he had created metrics to measure and manage health care costs, including pharmaceutical costs, as well as the number of outside medical trips, and outside medical service costs, and then successfully took action to quantify reductions across all three. Also, one regional official said he created a mobile ophthalmology clinic to provide specialty eye services to institutions throughout the region and estimated costs savings in service charges and custody costs for each visit. In another example, officials at one FMC we visited told us they expanded the physical therapy program in various ways to control costs. For example, the program offers its specialized staff to consult on cases in other institutions, utilizes unpaid physical therapy interns, and encourages its staff to specialize to perform procedures that would otherwise take place outside the institution, such as electromyography,[65] according to officials.[66]

BOP institutions have also sought to use technology to control health care costs. Notably, officials at FMC Lexington said that they have a partnership with an outside medical services provider, which provides the

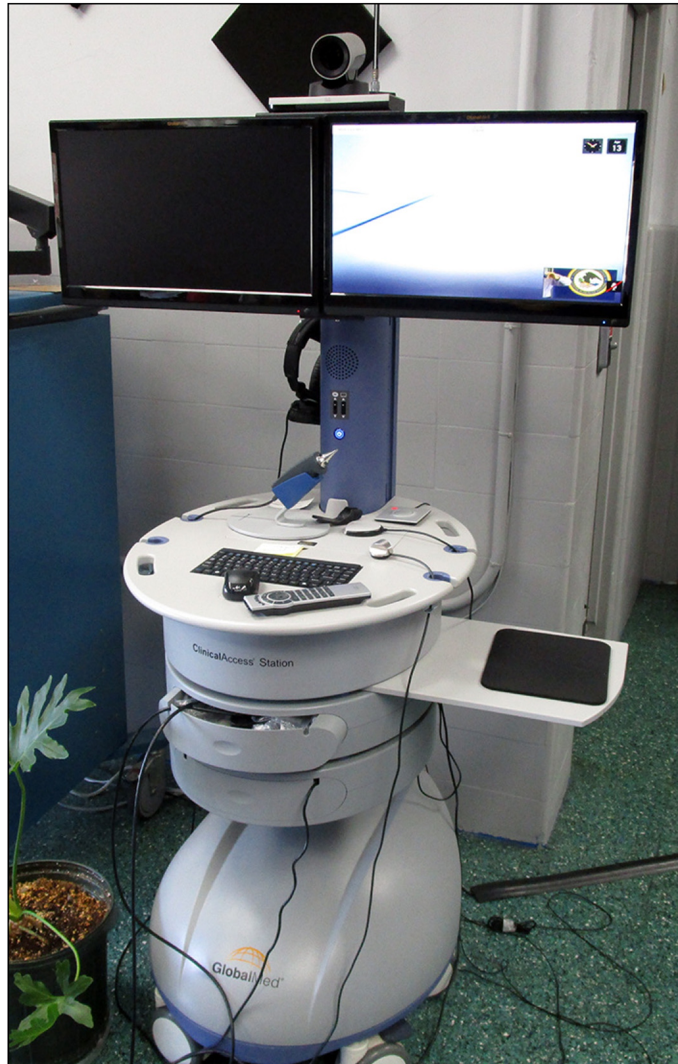
[64]BOP did not have a cost savings estimate but institution officials noted lower overtime costs due to this practice.

[65]Electromyography is a diagnostic test to assess the health of muscles and the nerve cells that control them.

[66]BOP did not have documentation to demonstrate this cost savings but institution officials explained that these initiatives controlled the institution's health care costs.

institution with some advanced telehealth equipment (see fig. 6). This has allowed it to expand its use of telehealth to more than twenty medical specialties. For fiscal year 2015, FMC Lexington officials estimated a cost savings of over $1.5 million due to their use of telehealth. Many institutions have also sought to acquire other kinds of equipment to control health care costs. For example, some institutions have purchased or leased robotics to support their pharmaceutical operations (see fig. 7), which has reduced the burden on staff to manually fill prescriptions and improve operational efficiency. According to BOP officials, the use of robotics equipment in its institutions' pharmacies allows BOP pharmacists to devote more time to improving patient outcomes by providing clinical pharmacist services. Officials in another FMC we visited told us they purchased a pressure mapping system for the institution's wound program to identify and prevent ulcers, which institution officials estimate has saved nearly $2.8 million for the period covering fiscal year 2009 through 2015.

Figure 6: Federal Medical Center Lexington Utilizes Specialized Telehealth Equipment to Conduct Specialty Clinics



Source: BOP. | GAO-17-379

Figure 7: Some Bureau of Prisons (BOP) Institutions Utilize Pharmacy Robotics to Reduce the Use of Manual Labor to Dispense Medication

Source: BOP. | GAO-17-379

According to officials, institutions share and learn about one another's approaches to health care cost control through various platforms. For example, BOP compiles its institutions' reported cost efficiencies and innovations, including those related to health care, in a catalogue that is designed to be a reference to all institution managers regarding the activities of their peers. Institution officials also share information on health care cost control through regular conferences and meetings. For example, officials at one institution we visited stated that they employ the practice of having an institution nurse check on hospitalized inmates on a weekly basis to determine if they can return to the institution to complete their care in order to avoid custody and hospitalization costs. The officials using this practice said they presented it at a BOP symposium where officials from other institutions also presented their best health care practices. Officials also told us that as BOP officials transfer from one institution to another, they can also transfer information about health care cost control.

BOP Has Planned and Implemented Initiatives without Considering Certain Elements of Sound Planning

BOP's long-standing strategic planning process has focused in some part on health care cost control, but BOP's overall planning practices have not incorporated certain elements of sound planning that we have previously identified. These elements generally call for the identification of objectives with a means to measure (1) progress toward objectives and (2) the effectiveness of activities to achieve objectives. They also call for the identification of resources and investments (as shown in table 11).[67]

Table 11: Elements of Sound Planning Applicable to GAO's Assessment of the Bureau of Prisons' Planning Process

Elements	Description
Goals and objectives, activities, milestones, and performance measures	The identification of goals and objectives to be achieved by the plan, activities, or actions to achieve those results, as well as milestones to measure progress and performance measures to assess the effectiveness of activities.
Resources and investments	The identification of costs to execute the plan and the sources and types of resources and investments, including skills and technology and the human, capital, information, and other resources required to meet the goals and objectives.

Source: GAO. | GAO-17-379

As part of its annual BOP-wide strategic plans, BOP developed the HSD Cost Efficiency and Innovation strategic objective to "maximize health care resources as a cost-containment strategy by applying evidence-based business practices and measuring performance through the use of appropriate industry-wide metrics."[68] However, this objective does not include measures of effectiveness or progress, such as milestones or performance measures, which, when properly supported by reliable data, are critical to effectively measuring improvement. BOP established this objective in 2011 with six underlying activities it refers to as action plans. BOP officials told us that a strategic objective is considered achieved

[67]We selected these elements from GAO's body of work on sound planning based on their applicability to BOP documents and officials' statements on sound planning. GAO has also reported on other elements in sound planning, including the identification of a mission statement; problem, scope and methodology; integration among and with other entities; roles, responsibilities and coordination; key external factors. See GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1996); *Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism*, GAO-04-408T (Washington, D.C.: Feb. 3, 2004); and *Veterans' Health Care: Proper Plan Needed to Modernize System for Paying Community Providers*, GAO-16-353 (Washington, D.C.: May 11, 2016).

[68]BOP changed the name of this objective in its 2015 BOP-wide strategic plan. It had been previously named "Healthcare Efficiency." There are other strategic objectives that relate to health care cost control, including Care Levels, BEMR, and Telehealth.

when the action plans are completed. However, simply completing an action plan does not ensure progress toward the achievement of the objective. For example, one of BOP's action plans under its HSD Cost Efficiency and Innovation strategic objective was to develop a methodology for ensuring health care expenditures reflect actual costs. BOP established nine metrics to evaluate financial performance and marked this action plan as "complete" in 2013. However, as of August 2016, BOP officials told us that they have not been able to collect comprehensive data for six of the nine metrics because of limitations to BOP's existing data systems or incomplete reporting. Moreover, BOP officials recognized the issues with this action because they stated that they are reconsidering the metrics they initially established. Thus, while BOP determined it had completed this action plan, the action itself did not produce any meaningful results. Although it is important for BOP to plan the actions or activities that it will take to achieve its objectives, it cannot rely only on the completion of activities to determine that it is achieving them. Without a means to measure progress toward its objective or effectiveness of its activities, BOP cannot reliably determine whether it is achieving its objective or that its efforts are effective. Determining whether or not BOP is making progress toward its HSD Cost Efficiency and Innovation strategic objective and whether its efforts are effective will also allow BOP management to determine what midcourse corrections may be needed in order to meet the objective.

In addition to the annual BOP-wide strategic plan, HSD established a five-year HSD Integrated Strategic Plan for the period of 2015 through 2019, which applies a financial management focus to every HSD branch and section. The financial management goal, which is the same for every HSD branch and section, is to "effectively manage the Health Services budget through an ongoing analysis of staffing, program efficiencies, and utilization of services to identify opportunities for current and future cost containment." Although HSD includes the financial management goal for each HSD branch or section, as well as the branch or section's implementation strategies and expected outcomes, the expected outcomes are generally not measurable. For example, the description of the financial management goal for HSD's Health Services Branch is to "employ new strategies to contain health care costs while maintaining quality of services" and the expected outcome is "BOP health care costs are strategically contained." HSD does not indicate how it will measure progress toward its larger goal, and its expected outcome provides no means of measuring progress. By stating that it aims to contain costs strategically, but not including performance measures to assess the effectiveness of activities—HSD's planning efforts do not incorporate the

elements of sound planning we have noted. Out of the 17 HSD branches and sections included in the HSD integrated strategic plan, only one—Pharmacy—included target benchmarks for financial management.

BOP officials told us that because BOP's per capita inmate health care costs are lower than the national health expenditure average per capita costs, BOP believes its efforts have successfully achieved cost savings. However, BOP's health care obligations exceeded $1.3 billion in fiscal year 2016, which is a significant portion of its nearly $6.9 billion appropriation, and its per capita health care obligations have continued to rise, particularly since 2013, which highlight the importance of controlling health care costs regardless of societal trends in health care spending.[69] Developing goals and objectives that include a means to measure progress would better position BOP management to assess its efforts to control health care costs and ensure these efforts are effective in achieving desired results.

As described previously, sound planning also calls for the identification of necessary resources and investments. BOP officials acknowledged that they do not systematically plan health care cost savings initiatives. As a result, BOP has not consistently identified the necessary resources and investments needed to implement its cost savings initiatives, or the external factors that could affect the achievement of its goals prior to implementation. For example, since 2011, BOP has planned to establish a mail-order or central fill pharmacy. BOP asserted that establishing a mail-order or central fill pharmacy would help it maximize pharmacy resources by consolidating prescription drugs into one main inventory. BOP reported in its Congressional Budget Justification for fiscal year 2017 that this effort could save BOP $10 million per year in inventory costs.[70] To implement this initiative, BOP began restructuring its pharmaceutical operations at its care level 1 institutions, with plans to continue doing so with care level 2 institutions. Two years later, in 2013, BOP noted that the costs of this initiative would exceed available agency funding and BOP would have to request additional funding from the Congress to support the initiative. When we asked BOP officials why the initiative had not yet been implemented, they told us that in any given

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[69]The nearly $6.9 billion appropriation is for the Salaries and Expenses portion of BOP's fiscal year 2016 annual appropriation and does not include the separate Buildings and Facilities appropriation for fiscal year 2016.

[70]BOP provided its methodology for estimating the cost savings but did not have documentation for the analysis of this estimate.

year when BOP sought to implement this initiative, it had either the funding or the space, but not both at the same time. Because BOP did not consider necessary resources and investments when this initiative was planned this initiative was not implemented earlier. Without consistently identifying the investments and resources needed, BOP risks expending unnecessary time and limited resources pursuing cost control initiatives that eventually may fail to achieve their goal of cost control.

BOP Does Not Document Its Mission Analyses of Its Federal Medical Centers

BOP employs a process every 3 to 4 years that it calls its “mission analysis,” to assess how effectively the care it provides meet the needs of inmates having complex medical and mental health disorders in its FMCs. BOP officials told us that they make decisions about how to allocate resources based on mission analyses; however, BOP does not document these analyses and therefore lacks a record to support decision-making for its resource allocations. During mission analysis, BOP seeks to determine how effectively its health care programs, resources, and community-based services meet the needs of inmates, determine priorities, assess potential efficiencies, and make recommendations for change. To conduct a mission analysis, BOP also conducts a cost assessment, which officials described as including a review of outside medical trips, contracted services, elective procedures, and overtime for escorted medical trips to community-based facilities and providers. BOP officials stated that the cost analysis team also reviews relevant documents with the local staff responsible for these activities, and gives an oral report once it concludes its work. As a result of these mission analyses, BOP institutions have adjusted or added new health care programs. For example, FMC Butner officials stated that after a mission analysis was completed there, BOP saw the need for, and subsequently established, hospice care services. Also, according to BOP, the mission analysis can provide officials with the information needed to consolidate or shift resources from one care level 4 institution to another. BOP recently made this kind of shift in resources in December 2016 when it converted Federal Correctional Institution Fort Worth to a Federal Medical Center and has already requested 36 full-time equivalents and over $4.7 million to expand and renovate the facility.

When we asked BOP for more information on how they conduct the mission analysis process or examples of written materials that guided their decision making, BOP officials told us they only document what participants consider the highlights in an executive summary. For example, the 2016 mission analysis for FMC Rochester that BOP provided to us was an overview of its health care services and staffing,

and recommendations for consideration. While the summary included recommendations, it did not include the analysis and findings to support the recommendations. BOP officials stated that the mission analysis was an opportunity for Central Office, region and institution leadership to meet and verbally discuss the status of the institution's missions, challenges, resources and ongoing activities. Nevertheless, Standards for *Internal Control in the Federal Government* calls for documentation as a necessary part of an effective internal control system, which is required to demonstrate its design, implementation and operating effectiveness.[71] Documenting its analyses and findings could help provide reasonable assurance that recommendations to shift resources at its higher care level institutions are based on sound evidence. According to BOP data, those higher care level institutions account for a sizable portion of medical services costs. Specifically, BOP's six care level 4 institutions—prior to adding Fort Worth to this list—accounted for about $350 million (or about 30 percent) of BOP's medical services costs for fiscal year 2015 while housing about seven percent of the inmate population.

Conclusions

Providing health care, including medical, dental, and mental health care, to the federal inmate population is an important and required part of BOP's broader mission to safely, humanely, and securely confine offenders in prisons. While BOP's inmate population has fallen since fiscal year 2014, health care costs have continued to increase in total, and on an annual per capita basis, due in part to factors that BOP cannot control, such as the aging inmate population, increasing pharmaceutical costs, and increasing costs of medical care in the community. Given the fiscal pressures facing BOP, as well as the rest of the government, it is critical that the agency focus its efforts on factors within its sphere of influence to ensure the prudent use of resources.

In many ways, BOP's efforts to understand and control its costs have been thwarted by limited data or limited applications of data already available. Although BOP recognizes the need for health care utilization data, and has identified a number of options for collecting these data, it has not yet assessed the most cost effective approach for obtaining such data. Conducting a cost-effectiveness analysis of the competing alternative solutions, and taking steps toward implementation of the most effective solution, would allow BOP to dedicate its resources judiciously.

[71] GAO-14-704G.

Further, while BOP has engaged other federal agencies to leverage purchasing power, it has not consistently collected and analyzed health care spending data across its institutions. Conducting a comprehensive spend analysis could help BOP identify additional strategic sourcing opportunities to acquire medical goods and services more efficiently.

In addition, BOP has undertaken various initiatives to control health costs but does not have assurance that these initiatives are achieving their cost control aim because it has not evaluated its initiatives on a regular basis. BOP has also not incorporated certain elements of sound planning into its strategic health care plans, including identifying a means to measure progress toward goals and objectives and a means to measure effectiveness of activities. BOP also has not identified the resources and investments needed to implement its initiatives, an additional element of sound planning that can help ensure successful implementation. By incorporating these sound planning elements, BOP could enhance its planning and implementation efforts before expending resources, better positioning itself for success as it aims to control health care costs.

Finally, when BOP sets out to make decisions about how to shift or consolidate resources—as it does when conducting its mission analyses—it does not document its analyses and findings to support its recommendations for decisions about resources. Strengthening this process would enhance its internal control system and better support the decisions it makes.

Recommendations for Executive Action

We recommend that the Director of BOP take the following five actions:

1. To better understand the available opportunities for collecting inmate health care utilization data, BOP should conduct a cost-effectiveness analysis of potential solutions, and take steps toward implementation of the most effective solution.
2. To better understand the available opportunities for controlling health care costs, BOP should implement its guidance to conduct “spend analyses” of BOP’s health care spending, using data sources already available.
3. To determine the actual or likely effectiveness of its ongoing or planned health care cost control initiatives, BOP should evaluate the extent to which its initiatives achieve their cost control aim.

4. To enhance its strategic planning for and implementation of health care cost control efforts, BOP should incorporate elements of a sound planning approach and
   - establish a means of measuring progress toward and effectiveness of its activities for its current strategic objectives and goals related to controlling health care costs; and
   - identify the resources and investments necessary for implementation of its planned health care cost control initiatives.
5. To improve the reliability and utility of its Federal Medical Center mission analyses, BOP should document the analyses and findings that underlie its recommendations.

Agency Comments and Our Evaluation

We provided a draft of this report to DOJ for review and comment. DOJ did not provide official written comments to include in this report. However, in an e-mail received on June 20, 2017, a DOJ official stated that BOP concurred with all five recommendations.

BOP also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the Attorney General, selected congressional committees, and other interested parties. In addition, this report is also available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any further questions about this report, please contact me at (202) 512-8777 or goodwing@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributions to this reported are listed in appendix IV.

Gretta L. Goodwin
Director, Homeland Security and Justice Issues

Appendix I: Objectives, Scope, and Methodology

Our objectives for this report were to examine: (1) how much the Bureau of Prisons (BOP) has obligated for inmate health care from fiscal years 2009 through 2016 and the factors that affect BOP's costs, (2) the extent to which BOP has data available to understand and help control its costs, and (3) the initiatives BOP has identified and implemented to help control health care costs and the extent to which BOP has effectively planned its health care cost control efforts.

To examine how much BOP has obligated for inmate health services over the past 8 fiscal years and the factors that have affected BOP's costs, we interviewed officials from BOP's Administration Division, Health Services Division (HSD), Psychology Services Branch, and Field Acquisition Office, as well as officials within BOP's six regional offices and at the 10 individual BOP institutions we visited, to understand why obligations have changed over time and the factors that have impacted those changes.[1] We selected the 10 BOP institutions to visit based in part on factors that both BOP and existing research indicated could be affecting costs, as well as other factors that allowed for variation in our sample. These factors included the institutions' medical care levels; their total and per capita medical services costs; the characteristics of the institutions' population, including gender and percentage of inmates age 55 or older; and geography.[2] The 10 institutions we visited encompassed all four medical care levels, had a range of per capita medical services costs from low to high, included both male and female populations, housed lower and higher percentages of inmates age 55 or older, were located in remote and metropolitan areas, and covered all six of BOP's regions. Although not generalizable, the visits provided important insight into how different institution and inmate characteristics impact costs. In addition, we reviewed key documents, such as BOP's Congressional Budget Justifications for fiscal years 2009 through 2018, BOP's Annual Financial

[1]The institutions we visited were United States Penitentiary Atwater, Federal Correctional Complex Beaumont, Federal Correctional Complex Butner, Federal Medical Center Carswell, Federal Correctional Complex Coleman, Federal Correctional Institution Fort Dix, Federal Correctional Institution Fort Worth, Federal Medical Center Lexington, Metropolitan Correctional Center New York, and Federal Medical Center Rochester. At the time of our visit, Fort Worth was a Federal Correctional Institution, but later became a Federal Medical Center.

[2]We computed the average age of inmates for each individual institution and calculated the percentage of inmates age 55 or older. We picked the age of 55 based on discussions with BOP officials, subject matter experts, and on academic and trade organization papers, who noted that 55 and older is generally the age at which inmates experience health problems related to aging. We then aggregated this information for BOP overall.

Statements, and the Department of Justice's Financial Management Information System Sub-Object Classification (SOC) Code Guide.[3]

We also analyzed BOP obligation data from fiscal year 2009 to 2016 on medical services, psychology services, drug and sex offender treatment programs, and medical staff training.[4] We included 8 years of obligations data in order to observe trends over time in health care costs. We decided to be inclusive of all categories of health care that are considered to be essential to treating health, which includes mental health and substance use disorder treatment. To determine the per capita obligations, we divided the total obligation by the inmate population at the end of each fiscal year. To adjust the per capita obligations for inflation, we used fiscal year 2016 as the baseline and adjusted each prior year to 2016 dollars by the Bureau of Economic Analysis and the IHS Global Insight Outlook inflation factor.[5] To better understand the composition of medical services obligations, we analyzed the breakout of these obligations by SOC code. Specifically, we used the SOC Code Guide to understand the various codes and how they could be grouped. We settled on five overarching categories: (1) salaries and benefits for medical staff, as well as related employee expenses, such as work travel; (2) outside medical care, which includes contractual medical services provided both inside and outside of BOP institutions by non-BOP medical staff; (3) supplies and materials, which includes pharmaceutical purchasing and other materials used in the provision of health services; (4) equipment of a durable nature, such as tools and implements, machinery, and information technology hardware; and (5) other, for all obligations that did not fit into the other categories, such as transportation of things, rent, communications, utilities, printing, and insurance claims.

To better understand the changes in pharmaceutical obligations over our time period, and what illnesses were impacting those obligations, we analyzed BOP's list of top 50 medications for fiscal years 2009 through 2016, and compared the medications to the U.S. National Library of Medicine's MedlinePlus list of drugs and supplements in order to

[3]Federal agencies use SOC Code Guides to standardize budgetary information. SOC codes define the nature of services or articles obligated.

[4]BOP includes dental services as part of medical services.

[5]IHS Global Insight is a firm that provides comprehensive economic and financial information on countries, regions, and industries.

determine the uses.[6] We compiled a list of medications used to treat hepatitis C, cancer, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), and psychotropic medications, which are generally used to treat mental illness. The remaining medications were used to treat a variety of illnesses, or were too few to create a category. We therefore created a category of other for the remaining medications. To assess the reliability of BOP's obligations and expenditures data, we (1) performed electronic data testing and looked for obvious errors in accuracy and completeness, and (2) interviewed agency officials knowledgeable about BOP's budget to determine the processes in place to ensure the integrity of the data. We determined that the data were sufficiently reliable for the purposes of this report. Finally, since geographic location may impact the provision or cost of inmate health care, we analyzed BOP institutions' proximity to hospitals.[7] To do this, we used geographic information services software to map the addresses of all BOP institutions, and verify how many hospitals were within a 20 mile radius of the institution.[8] We created four categories—institutions that had no hospitals within 20 miles, institutions that had 1 to 5 hospitals within 20 miles, institutions that had 6 to 10 hospitals with 20 miles, and institutions that had 11 or more hospitals within 20 miles.

To examine the extent to which BOP has data available to understand and help control its costs, the initiatives BOP has implemented and identified to help control health care costs, and how effectively BOP has planned and implemented these initiatives, we reviewed relevant BOP program statements. We conducted interviews with BOP officials from the Health Services, Reentry Services, and Information, Policy, and Public Affairs Divisions, as well as the Office of General Counsel in BOP's

[6]MedlinePlus, produced by the National Library of Medicine, is the National Institutes of Health's web site that contains extensive information on prescription and nonprescription drugs, in addition to information on over 1,000 diseases and conditions.

[7]For the purposes of our analysis, a hospital is defined as a building or building complex providing general medical or surgical inpatient care. It includes general hospitals, specialty hospitals (such as cancer, maternity, substance abuse, psychiatric, and rehabilitation hospitals). It does not include psychiatric or behavioral facilities that are not hospitals, long-term care medical centers or nursing homes, walk-in centers or outpatient clinics, imaging centers, medical doctors' offices, and rehabilitation centers.

[8]BOP has 122 BOP-operated institutions, 39 of which are located in one of 15 Federal Correctional Complexes (FCC). FCCs are a cluster of institutions with different missions (for example, medical/mental health, pretrial, and holdover), which are located together. Because they are located together, for the purposes of this analysis we counted an FCC as one institution. When counting an FCC as one institution, there are 98 BOP institutions.

Central Office, given their responsibilities in this arena. We also interviewed officials from each of the six BOP regions and the Field Acquisition Office. Further, we reviewed current Office of Management and Budget (OMB) and BOP policies on cost-effectiveness analysis to analyze BOP's efforts to gather data. Additionally, for background on correctional health care costs and BOP health care, we reviewed articles and reports from various organizations, including the Congressional Budget Office, Congressional Research Service, and several academic and research institutes and interviewed researchers and economists from some of them to understand their methodologies and explore their findings. Further, we interviewed two correctional health clinicians from non-federal medical institutions due to their knowledge of the aging inmate population and telehealth. To determine the extent of available data on BOP health care costs, we searched the Federal Procurement Data System-Next Generation (FPDS-NG) for BOP contract actions by institution for fiscal years 2009 through 2015 and obtained pharmaceutical obligations data from BOP for that same period. Based on these steps, we determined the data were sufficiently reliable for the purposes of our reporting objective. In addition to interviews, to determine how well BOP's health care cost control planning mechanisms work, we obtained and reviewed selected portions of the annual BOP-wide strategic plans, the BOP's HSD Governing Board Meeting Minutes through 2015, and the HSD Strategic Plan for 2015 through 2019. To identify BOP's health care cost control efforts, their status of implementation, and the extent to which BOP had conducted cost estimates for each, we relied on the testimonial and documentary evidence the aforementioned BOP officials provided, reviewed previous GAO reports, Department of Justice (DOJ) Office of Inspector General (OIG) reports, and BOP Congressional Budget Justifications for fiscal years 2009 through 2018.[9] We summarized this information into a data collection instrument for verification by BOP officials and requested additional data and supporting documentation for each. We reviewed the information BOP provided in the data collection instrument to identify missing or unclear information and resubmitted the data collection instrument for BOP's secondary verification. We also interviewed officials

[9]See for example: GAO, *Bureau of Prisons: Information on Efforts and Potential Options to Save Costs*, GAO-14-821 (Washington, D.C.: Sept. 30, 2014). DOJ OIG, *The Federal Bureau of Prison's Efforts to Manage Inmate Health Care*, Audit Report 08-08 (Washington, D.C.: Feb. 2008); and *Follow-Up Audit of the Federal Bureau of Prisons' Efforts to Manage Inmate Health Care*, Audit Report 10-30 (Washington, D.C.: July 2010).

from DOJ OIG and DOJ's Justice Management Division[10] to discuss prior report recommendations on BOP health care costs. Further, at the 10 institutions we visited, we interviewed institution officials and observed health care programs and cost control efforts. We also requested and obtained several documents relating to the costs and cost savings of regional and institutional initiatives to control health care costs.

We conducted this performance audit from February 2016 to June 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[10]DOJ's Justice Management Division (JMD) provides DOJ with advice on policy for budget and financial management, program evaluation, auditing, personnel management and training, procurement, information processing and telecommunications, security and for all matters pertaining to organization, management, and administration. In 2012, JMD budget staff issued an assessment of BOP's method for procuring medical services and potential ways to reduce costs, including cost savings opportunities.

Appendix II: Bureau of Prisons (BOP) Institutions by Medical Care Level as of March 2017

Medical care level[a]	Institution name[b]	Institution location
Care level 1		
	Atwater USP	Atwater, CA
	Bennettsville FCI	Bennettsville, SC
	Berlin FCI	Berlin, NH
	Big Sandy USP	Inez, KY
	Herlong FCI	Herlong, CA
	Lee USP	Pennington Gap, VA
	Manchester FCI	Manchester, KY
	McDowell FCI	Welch, WV
	McKean FCI	Lewis Run, PA
	Mendota FCI	Mendota, CA
	Oxford FCI	Oxford, WI
	Pollock Medium FCI	Pollock, LA
	Pollock USP	Pollock, LA
	Ray Brook FCI	Ray Brook, NY
	Safford FCI	Safford, AZ
	Sandstone FCI	Sandstone, MN
	Three Rivers FCI	Three Rivers, TX
	Yankton FPC	Yankton, SD
	Yazoo City Low FCI	Yazoo City, MS
	Yazoo City Medium FCI	Yazoo City, MS
	Yazoo City USP	Yazoo City, MS
Total care level 1 institutions = 21		
Care level 2		
	Alderson FPC	Alderson, WV
	Aliceville FCI	Aliceville, AL
	Allenwood Low FCI	Allenwood, PA
	Allenwood Medium FCI	Allenwood, PA
	Allenwood USP	Allenwood, PA
	Ashland FCI	Ashland, KY
	Atlanta USP	Atlanta, GA
	Bastrop FCI	Bastrop, TX
	Beaumont Low FCI	Beaumont, TX
	Beaumont Med FCI	Beaumont, TX
	Beaumont USP	Beaumont, TX

Medical care level[a]	Institution name[b]	Institution location
Care level 2		
	Beckley FCI	Beckley, WV
	Big Spring FCI	Big Spring, TX
	Brooklyn MDC	Brooklyn, NY
	Bryan FPC	Bryan, TX
	Butner Low FCI	Butner, NC
	Butner Medium I FCI	Butner, NC
	Butner Medium II FCI	Butner, NC
	Canaan USP	Waymart, PA
	Chicago MCC	Chicago, IL
	Coleman I USP	Sumterville, FL
	Coleman II USP	Sumterville, FL
	Coleman Low FCI	Sumterville, FL
	Coleman Medium FCI	Sumterville, FL
	Cumberland FCI	Cumberland, MD
	Danbury FCI	Danbury, CT
	Dublin FCI	Dublin, CA
	Duluth FPC	Duluth, MN
	Edgefield FCI	Edgefield, SC
	El Reno FCI	El Reno, OK
	Elkton FCI	Lisbon, OH
	Englewood FCI	Littleton, CO
	Estill FCI	Estill, SC
	Fairton FCI	Fairton, NJ
	Florence ADMAX USP	Florence, CO
	Florence FCI	Florence, CO
	Florence High USP	Florence, CO
	Forrest City Low FCI	Forrest City, AR
	Forrest City Medium FCI	Forrest City, AR
	Fort Dix FCI	Fort Dix, NJ
	Fort Worth FMC	Fort Worth, TX
	Gilmer FCI	Glenville, WV
	Greenville FCI	Greenville, IL
	Guaynabo MDC	Guaynabo, PR
	Hazelton FCI	Bruceton Mills, WV
	Hazelton USP	Bruceton Mills, WV
	Honolulu FDC	Honolulu, HI

Medical care level[a]	Institution name[b]	Institution location
Care level 2		
	Houston FDC	Houston, TX
	Jesup FCI	Jesup, GA
	La Tuna FCI	Anthony, TX
	Leavenworth USP	Leavenworth, KS
	Lewisburg USP	Lewisburg, PA
	Lexington FMC	Lexington, KY
	Lompoc FCI	Lompoc, CA
	Lompoc USP	Lompoc, CA
	Loretto FCI	Loretto, PA
	Los Angeles MDC	Los Angeles, CA
	Marianna FCI	Marianna, FL
	Marion USP	Marion, IL
	McCreary USP	Pine Knot, KY
	Memphis FCI	Memphis, TN
	Miami FCI	Miami, FL
	Miami FDC	Miami, FL
	Milan FCI	Milan, MI
	Montgomery FPC	Montgomery, AL
	Morgantown FCI	Morgantown, WV
	New York MCC	New York, NY
	Oakdale I FCI	Oakdale, LA
	Oakdale II FCI	Oakdale, LA
	Oklahoma City FTC	Oklahoma City, OK
	Otisville FCI	Otisville, NY
	Pekin FCI	Pekin, IL
	Pensacola FPC	Pensacola, FL
	Petersburg Low FCI	Hopewell, VA
	Petersburg Medium FCI	Hopewell, VA
	Philadelphia FDC	Philadelphia, PA
	Phoenix FCI	Phoenix, AZ
	San Diego MCC	San Diego, CA
	Schuylkill FCI	Minersville, PA
	Seagoville FCI	Seagoville, TX
	Seatac FDC	Seattle, WA
	Sheridan FCI	Sheridan, OR
	Talladega FCI	Talladega, AL

Medical care level[a]	Institution name[b]	Institution location
Care level 2		
	Tallahassee FCI	Tallahassee, FL
	Terminal Island FCI	San Pedro, CA
	Terre Haute FCI	Terre Haute, IN
	Terre Haute USP	Terre Haute, IN
	Texarkana FCI	Texarkana, TX
	Thomson Administrative USP	Thomson, IL
	Tucson FCI	Tucson, AZ
	Tucson USP	Tucson, AZ
	Victorville Medium I FCI	Victorville, CA
	Victorville Medium II FCI	Victorville, CA
	Victorville USP	Victorville, CA
	Waseca FCI	Waseca, MN
	Williamsburg FCI	Salters, SC
Total care level 2 institutions = 96		
Care level 3		
	Allenwood Medium FCI	Allenwood, PA
	Allenwood USP	Allenwood, PA
	Butner FMC	Butner, NC
	Butner Low FCI	Butner, NC
	Butner Medium I FCI	Butner, NC
	Butner Medium II FCI	Butner, NC
	Carswell FMC	Fort Worth, TX
	Coleman I USP	Sumterville, FL
	Coleman II USP	Sumterville, FL
	Coleman Medium FCI	Sumterville, FL
	Devens FMC	Ayer, MA
	Fort Worth FMC	Fort Worth, TX
	Lexington FMC	Lexington, KY
	Rochester FMC	Rochester, MN
	Springfield MCFP	Springfield, MO
	Terminal Island FCI	San Pedro, CA
	Terre Haute FCI	Terre Haute, IN
	Terre Haute USP	Terre Haute, IN
	Tucson USP	Tucson, AZ
	Victorville USP	Victorville, CA
Total care level 3 institutions = 20		

Medical care level[a]	Institution name[b]	Institution location
Care level 4		
	Butner FMC	Butner, NC
	Carswell FMC	Fort Worth, TX
	Devens FMC	Ayer, MA
	Fort Worth FMC	Fort Worth, TX
	Lexington FMC	Lexington, KY
	Rochester FMC	Rochester, MN
	Springfield MCFP	Springfield, MO
Total care level 4 institutions = 7		

Legend:
FCC refers to Federal Correctional Complex
FCI refers to Federal Correctional Institution
FDC refers to Federal Detention Center
FMC refers to Federal Medical Center
FPC refers to Federal Prison Camp
FTC refers to Federal Transfer Center
MCC refers to Metropolitan Correctional Center
MCFP refers to Medical Center for Federal Prisoners
MDC refers to Metropolitan Detention Center
USP refers to U.S. Penitentiary

Source: BOP. | GAO-17-379

[a]BOP classifies both institutions and inmates by care level. BOP does not define the criterion for the institution care level but rather bases it on the medical resources available to meet the needs of inmates of a particular care level. Generally, institutions at each care level are designed to house mostly inmates at that designated medical and mental care level; however, inmates housed at every institution will be comprised of a mixture of care levels. According to BOP, factors that affect inmate care level variation includes changes in health status, proximity to family, separation from threat groups, security level, ongoing legal cases, or participation in residential treatment programs. No institution will have an inmate population composed of a given care level.

[b]Some institutions are categorized as two different care levels (i.e. care level 1 and 2, or 2 and 3, or 3 and 4) and therefore are double counted in this table. Additionally, some institutions are complexes made up of two or more institutions. The institutions within the complexes are counted separately.

Appendix III: Bureau of Prisons (BOP) Federal Medical Centers

BOP has seven care level 4 institutions, also referred to as Federal Medical Centers (FMC), spread out throughout the United States.[1] The FMCs provide care to inmates in need of more advanced medical or mental health care. Following are descriptions for each FMC.

- FMC Butner (Butner, North Carolina) is part of an FCC and serves as a major medical and psychiatric referral center for male inmates. FMC Butner has all specialty areas of medicine and is the primary referral center for oncology, providing chemotherapy and radiation therapy. FMC Butner also manages a broad range of subacute and chronically ill inmates and has an orthopedic surgery program available. Dialysis services are provided on-site. Butner also has an extensive inpatient forensics program. As of May 2017, there were 927 inmates at FMC Butner.
- FMC Carswell (Fort Worth, Texas) serves as the major medical and psychiatric referral center for female inmates. All specialty areas of medicine are available through in-house staff and community-based consultant specialists. As of May 2017, there were 1,171 inmates at FMC Carswell.
- FMC Devens (Devens, Massachusetts) serves both medical and mental health care needs for male inmates. All specialty areas of medicine are available through in-house staff and community-based consultant specialists. Additional services provided include dialysis treatment for inmates with end-stage renal failure. As of May 2017, there were 956 inmates at FMC Devens.
- FMC Fort Worth (Fort Worth, Texas) officially began its medical center mission on December 7, 2016. When fully operational, FMC Fort Worth will serve both medical and mental health needs of male inmates. The institution will expand from 36 to 72 medical beds having 24-hour nursing care, and will include a 21-bed inpatient forensics unit and a care level 3 Mental Health Step Down Unit Program.[2] BOP anticipates that all necessary building renovations and hiring of medical center staff will be completed within 24 months of its formal

[1]Six of the medical referral centers are named Federal Medical Center (FMC) and one is named United States Medical Center for Federal Prisoners. According to BOP, there is no salient difference in the medical mission for the seven institutions and therefore all can be referred to as FMCs.

[2]The Mental Health Step Down Unit Program is a residential treatment program offering an intermediate level of care for inmates with serious mental illnesses. The program is specifically designed to serve inmates who do not require inpatient treatment, but lack the skills to function in a general population setting.

conversion to a medical center mission. As of May 2017, there were 1,492 inmates at FMC Fort Worth.

- FMC Lexington (Lexington, Kentucky) serves male inmates. All specialty areas of medicine are available by in-house staff and community-based consultant specialists. FMC Lexington serves as the primary referral center for inmates with most types of leukemia and lymphoma, and performs outpatient forensic studies. As of May 2017, there were 1,356 inmates at FMC Lexington.
- FMC Rochester (Rochester, Minnesota) serves as a major medical and mental health referral center for male inmates. FMC Rochester is the primary referral center for inmates with end-stage liver disease and advanced HIV infection, as well as other infectious diseases requiring long-term management. FMC Rochester provides extensive psychiatric and psychology services, including inpatient psychiatry services and forensic studies. As of May 2017, there were 665 inmates at FMC Rochester.
- U.S. Medical Center for Federal Prisoners (MCFP) Springfield (Springfield, Missouri) serves as a major medical and psychiatric referral center for male inmates. MCFP Springfield provides all specialty areas of medicine through in-house staff and community-based consultant specialists, and is the primary referral center for high security inmates. The institution maintains extensive psychiatric and psychological services, to include inpatient forensic studies. It is the major kidney dialysis center for the BOP. As of May 2017, there were 1,031 inmates at MCFP Springfield.

Figure 8: Selected Images of Health Services Facilities and Equipment at Bureau of Prisons' (BOP) Federal Medical Centers

Chemotherapy Room

Operating Room

Physical Therapy Room

Medical Laboratory

Source: BOP. | GAO-17-379

Note: These images represent various health care facilities at BOP institutions. They are not necessarily reflective of the facilities at all BOP institutions, which may differ based on medical care level and available resources.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the contact named above, Joy Booth (Assistant Director); Valerie Kasindi (Analyst-in-Charge); Dina Shorafa; Sara Rizik; Lori Achman; Pedro Almoguera; Willie Commons, III; Eric Hauswirth; Susan Hsu; Amanda Miller; Claire Peachey; and William T. Woods made key contributions to this report

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