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United States General Accounting Office Washington, D.C. 20548

Health, Education, and Human Services Division

B-249967

February 10, 1994

The Honorable William J. Hughes
Chairman, Subcommittee on Intellectual Property
and Judicial Administration
Committee on the Judiciary
House of Representatives

Dear Mr. Chairman:

In March 1992, you requested that we evaluate the adequacy of the Federal Bureau of Prison's (BOP) medical services and the effectiveness of its medical service's quality assurance program. At that time, allegations of patient neglect, unacceptable medical practices, and incompetent physicians in BOP were receiving attention in the national media.

As agreed with your office, we reviewed the following four issues:

- Are inmates with special medical needs—including women, psychiatric patients, and inmates with chronic medical conditions—receiving the care they need?
- Does BOP have quality assurance systems in place that detect problems with health care, and is corrective action taken to prevent similar problems?
- Are BOP physicians and other health care providers qualified to perform the services they are assigned?
- Is BOP considering the most cost-effective alternatives to meet inmates' rising needs for medical services?

We also agreed to concentrate our review on three of BOP's seven medical referral centers—Butner, North Carolina, which serves only male psychiatric patients; Lexington, Kentucky, which provides medical services only to female inmates; and Springfield, Missouri, which serves only male inmates. We reviewed selected reports and correspondence from the other four centers.

### Background

Bor's Health Services Division is responsible for providing health care services to approximately 78,000 inmates housed in 71 correctional facilities throughout the United States. This includes emergency and

<sup>&</sup>lt;sup>1</sup>The other four medical centers are in Rochester, Minnesota; Terminal Island, California; Fort Worth, Texas; and Carville, Louisiana.

urgent care and care needed to prevent further deterioration of an inmate's condition. At most correctional facilities, only basic care, such as a physical examination, is provided. Inmates who require more intensive care or suffer from chronic conditions are either treated at one of seven BOP medical referral centers or are referred to community hospitals with which BOP contracts to provide the needed care.

Bop's medical referral centers are staffed by physicians, dentists, physician assistants, nurses, and other health care staff. They provide care to inmates of various security levels, from minimum to high. Five of the centers treat male patients only, one treats female patients only, and one provides care to patients of both sexes. The centers provide various types of services to patients, including medicine, surgery, radiology, psychiatry, and laboratory services. Inpatient services are available only at the centers. None of the centers provides tertiary care. In addition, each of the centers houses nonpatient inmates who help maintain the centers. The services provided by each of the three centers we visited are described in appendices II, III, and IV.

BOP has directed six of its seven medical referral centers to seek accreditation by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).<sup>3</sup> Each was surveyed in March 1993 for accreditation. Five were fully accredited and one, the Terminal Island, California, center, was refused accreditation.

#### Results in Brief

Inmates with special needs, including women, psychiatric patients, and patients with chronic illnesses,<sup>4</sup> were not receiving all of the health care they needed at the three medical referral centers we visited. This situation was occurring because there were insufficient numbers of physician and nursing staff to perform required clinical and other related tasks. For example, physicians did not always have enough time to supervise physician assistants who provided the bulk of the primary care given to inmates, and nurses did not have sufficient time to provide individual and group counseling to psychiatric patients. As a result, some patients'

<sup>&</sup>lt;sup>2</sup>Tertiary care medical centers have the capability to provide all medical or surgical care, such as surgery that requires an intensive care unit for recovery.

<sup>&</sup>lt;sup>3</sup>Carville is managed and operated by the Public Health Service (PHS), which provides medical care to BOP inmates under an interagency agreement. PHS has not sought JCAHO accreditation for Carville.

<sup>&</sup>lt;sup>4</sup>Chronic conditions are permanent or long-term health care needs that do not require constant and extensive medical monitoring by a physician.

conditions were not improving and others were at risk of serious deterioration.

While all three centers had quality assurance programs intended to identify problems with health care, two of the centers failed to correct identified quality assurance problems. At Springfield, key staff, such as physicians, did not use adverse outcome data to help improve inmates' care, while Lexington was so understaffed its personnel could not act on any but the most severe problems identified. As a result, quality-of-care problems recurred.

Physicians at each of the centers we visited were qualified to perform the work they were assigned. However, many physician assistants did not meet the training and certification requirements of the medical community outside of BOP.

To reduce its reliance on community hospitals and the associated costs of providing health care to patients in a non-Bop setting, 5 Bop is considering constructing six large acute tertiary care hospitals; acquiring several military facilities; or both. But Bop has not yet developed the data with which to determine what kind of medical services are needed by its inmates or the type of services it can efficiently and effectively provide. Absent such data, Bop has little basis for deciding the numbers and types of staff it would need to operate these hospitals.

BOP needs to determine its basic requirements and consider the costs and benefits of other alternatives for meeting its needs before proceeding with the construction or acquisition of facilities. For example, BOP can draw on the experience of several states that have had problems similar to BOP's in providing inmates access to adequate medical care. These states have contracted out some or all of their inmate medical care and found that the medical care received under this process is better than it was when the prison system was providing the care directly, according to state officials.

<sup>&</sup>lt;sup>5</sup>The cost to provide inmates with medical care at community hospitals increased by 27 percent from fiscal year 1991 to 1992, from \$53.5 to \$68.0 million.

#### **Principal Findings**

Women Inmates Not Receiving Timely Pelvic Examinations and Pap Tests BOP policy requires that female inmates receive a physical examination, which includes a pelvic examination and Pap test, when entering the prison system and, thereafter, on an annual basis. The physical examinations are done to detect any health problems that might exist, and the pelvic examinations and Pap tests are designed to detect cancer at its early stages. The examinations and Pap tests are especially important in identifying and treating sexually transmitted diseases, which many of these women contracted before entering the federal prison system. If these diseases are left untreated, irreversible complications can occur.

But at the Lexington Medical Referral Center, which specializes in providing medical care to women, pelvic examinations and Pap tests were not done in a timely manner and in some cases may not have been done at all. In fact, these tests were often only performed when the patient had a problem that brought her to sick call, according to the center's former Clinical Director. As a result, patients were at risk of having an undetected, untreated cancer progress to a serious condition before it received attention. This situation was occurring because medical staff at Lexington could not perform the pelvic examinations and Pap tests and also perform their required daily duties.

In August 1992, the gynecology nurse at Lexington estimated that the center was 6 months behind in performing pelvic examinations and Pap tests. At that time, the gynecology service had a full-time gynecologist, a full-time nurse practitioner, and a part-time physician assistant to perform these functions. However, the staffing situation worsened in the ensuing months. In January 1993, the only gynecologist at Lexington transferred to another facility for personal reasons. In June 1993, the nurse practitioner for the gynecology clinic retired, leaving only a part-time physician assistant and a clinical nurse to provide gynecological examinations, tests, and treatment in the gynecology service. The clinical nurse, a registered nurse, could not do pelvic examinations and Pap tests because she was not credentialed to do so.<sup>6</sup> Thus, as of June 14, 1993, only a part-time physician assistant was providing care in the gynecology service for about 2,000 inmates.

<sup>&</sup>lt;sup>6</sup>A registered nurse's (RN) scope of practice does not usually include performing pelvic examinations or Pap tests unless the RN is a specialist with advanced training in gynecology.

Staffing shortages were not the only reason pelvic examinations and Pap tests were delayed or not performed. Lexington had no system to assure that all new entrants to the center were referred to a physician, nurse practitioner, or physician assistant who could perform the examination and test. Upon entry to the center, inmates are seen by a physician assistant, who determines from their health care record whether they need a pelvic examination and Pap test. Those requiring such services are referred to the gynecology service. But Lexington's former gynecologist told us that if a physician assistant fails to make this referral to a physician, the patient will not be seen unless she requests the examination or develops a problem that requires the examination and test. Because no one reviews the physician assistants' work to assure that inmates' needs for specialized tests are accurately recorded, a patient with a gynecological problem could enter the prison system and have the problem go undetected until it had advanced to a serious state.

#### Psychiatric Patients Not Receiving Needed Therapy

Many psychiatric patients in the Springfield and Lexington Medical Referral Centers were not receiving regularly scheduled individual and group therapy that could improve their mental condition. This situation was occurring because neither facility had a sufficient number of psychiatrists to perform this work. In fact, the Chief of Psychiatry at Lexington told us that he could not provide the type of psychiatric care each patient needed and was lucky if he could "eyeball" each patient daily. The staffing shortages in these centers were placing inmate patients at risk of receiving poor or untimely psychiatric assessments and inadequate monitoring of their mental conditions.

Bop's Chief Psychiatrist told us that an ideal staffing pattern in a Bop psychiatric unit is one psychiatrist for each 20 to 25 patients. Using the staffing pattern cited by the Chief Psychiatrist, Springfield would need a minimum of 12 psychiatrists to provide quality mental health care. But Springfield has not met this standard. In September 1989, Springfield was authorized seven psychiatric positions to serve approximately 300 acute and chronic care mental health patients. But between January 1991 and August 1992, it never had more than four psychiatrists. In April 1991, it had only one psychiatrist working in the center. In 1992, Springfield decreased the number of authorized psychiatrist positions to five, and by June 1993, four of these positions were filled. But, this number of psychiatrists is insufficient to provide adequate treatment to the 294 acute and chronic care mental health patients the center serves.

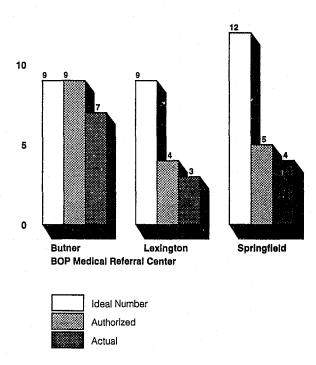
The Lexington Medical Referral Center was also below its authorized number of psychiatrists. At the time of our visit in July 1992, Lexington was authorized three psychiatrists but had only two for 237 acute and chronic care mental health patients. In March 1993, BOP authorized Lexington to hire a fourth psychiatrist. However, in July 1993, the center had only three psychiatrists on its staff. To meet the Chief Psychiatrist's optimal staffing level, the center would need nine psychiatrists.

Of the centers we visited, Butner was the only facility whose authorized strength met optimal staffing requirements. It was authorized nine psychiatrist positions to treat its 230 acute and chronic care mental health patients. However, as of July 31, 1993, only seven of these positions had been filled.

Figure 1 shows the number of psychiatrists needed for ideal staffing, the number of authorized positions, and the number of positions filled at the three centers as of July 1993.

Figure 1: Psychiatrist Staffing at Three BOP Centers (July 1993)





Number of Authorized Nursing Positions at Centers Is Insufficient Nursing shortages were prevalent in the psychiatric units at each of the three centers we visited. As a result, nurses at each location told us that their efforts were limited to addressing patients' immediate symptoms, such as disruptive behavior, and they had no time to seek long-term solutions to patients' psychiatric conditions. For example, in Lexington, one nurse was usually assigned to 34 acute mental health patients on each shift. In Springfield and Butner, the nurse-to-patient ratios were roughly the same—Springfield assigns four to seven nurses per shift for 177 acute mental health patients, and Butner assigns one to three nurses per shift for 75 acute mental health patients.

Although BOP has no staffing policies governing nurse-to-patient ratios, psychiatric nurses at all three centers told us that they could not adequately treat all their patients under the current staffing arrangements. For example, Butner's Director of Nursing in a May 1993 memo to the Associate Warden for Health Services said that the nurses provide about 13 minutes of nursing care a day for each patient. She added that no other

health care institution measures patients' nursing care time in minutes rather than hours. Further, the Director of Nursing believes that the authorized staffing level of 15 nurses is dangerously low. During its March 1993 accreditation survey, a JCAHO surveyor also stated that Butner needed more nurses. However, even if the central office approves an increase in nursing staff at Butner, the Director of Nursing is not sure she can fill positions with nurses from the community because its salaries are at least \$7,000 below nursing salaries in the community. Butner asked for an increase in nursing salaries in 1992, but central office refused the request, stating that the center did not have enough vacancies to justify the salary increase.

The situation was the same at the Lexington Medical Referral Center. In March 1993, BOP's central office approved 20 additional medical positions (10 nurse positions and 10 other positions such as physician assistant and occupational therapist) for Lexington. At that time, BOP's Medical Director told us that the center was in a crisis situation and needed the additional staff to provide adequate care to the patients. However, as of June 1993, the center had not received funding for the positions and had not hired any nurses. Further, it was still unclear whether the center would be able to recruit the additional nurses because its salaries were about \$3,000 per year below those found in the community.

The Director of Nursing at the Springfield Medical Referral Center told us that nurses were available in the Springfield area and that recruiting and retaining nurses were not problems. But nurses at the center told us that the number of authorized nursing positions was too low to provide adequate care to both the mental health patients and the medical and surgical patients. For example, from March to May 1993, some nurses on the mental health unit were asked to fill in on the medical and surgical units while nurses were on leave. The Warden stopped this practice in May because it jeopardized the medical condition of the mental health patients in units from which the nurses were drawn. In July 1993, despite receiving overtime from its nurses to staff the medical and surgical units, the center could not meet all its patients' needs. For example, from July 11 to July 17, 1993, the center had 2,141 hours of nursing staff absences in surgical, medical, and mental health units, according to the Director of Nursing. But only 40 of these hours were covered through overtime; the remaining hours were not covered.

The Springfield Medical Referral Center has not requested additional nursing positions from the central office because the nursing department

has not accurately determined patients' nursing needs. Rather than determining the amount of nursing time needed to fully address patients' needs, the nursing department schedules only the staff time it has available to provide care. This action justifies the existing nurse staffing levels. But according to the nursing staff, the medical and surgical patients admitted to the center during 1993 are more acutely ill than patients admitted in past years. As a result, they stated that the patients need more hours of care than they can provide within existing staff levels. For example, between December 1991 and June 1993 the number of end-stage acquired immunodeficiency syndrome (AIDS) patients being treated at the Springfield center increased from 10 to 31. Therefore, more hours of nursing time were needed to care for these patients than other, less ill patients would need.

Some nurses at Lexington also told us that if BOP hired psychiatric technicians, more of the psychiatrists' and nurses' time could be spent in providing therapy to psychiatric patients. BOP's Medical Director told us that he was considering the use of psychiatric technicians at the medical centers but, as of March 1993, he had not acted on this issue.

#### Some Inmates With Chronic Conditions Not Receiving Follow-Up Care

Patients with chronic conditions that cannot be stabilized often require frequent observation and monitoring by a nurse in a chronic care unit. However, the Lexington Medical Referral Center closed its chronic care unit in August 1990 because it did not have a sufficient number of nurses to staff the unit. As a result, most inmates with chronic care conditions, such as high blood pressure, diabetes, and cardiac conditions, were housed in units that did not have frequent monitoring by nurses. The center relied on inmates with chronic conditions to appear at sick call or schedule a clinic appointment themselves when they needed medical care. The Clinical Director told us that physicians try to periodically check when their chronic care patients were last seen. But with little time to see scheduled patients, this check is not a priority and is not always made.

Relying on inmates with chronic health problems to appear at sick call or schedule a clinic appointment for themselves is ineffective because some chronically ill inmates may not recognize that their conditions warrant medical treatment until the condition becomes serious. For example:

 An inmate housed in a unit that did not have frequent nurse monitoring at the Lexington Medical Referral Center had serious chronic problems, including hypertension, diabetes, and renal difficulties. From January 1992 until her death in July 1992, the patient was periodically admitted to the acute inpatient care unit at the Lexington Medical Referral Center and to two community hospitals for treatment of her existing conditions. But her condition required closer monitoring. After each admission/treatment, she was returned to a unit that did not have frequent monitoring by nurses and was told to present herself to the clinic if further problems occurred. The inmate did not assure that her treatment for diabetes was closely regulated, and she developed hypoglycemia. The situation went undetected until another inmate brought the patient to the medical staff in a confused state. The patient was transferred to a community hospital for treatment but eventually died. The Clinical Director told us that if the center had sufficient nursing staff to operate a chronic care unit for this type of patient, the hypoglycemia might not have gone undetected and treatment could have been started sooner, possibly preventing the patient's death.

BOP policy requires that patients with AIDS be seen monthly. But this was not occurring at the Lexington Medical Referral Center because the center did not have sufficient medical staff to perform required work. Rather than monthly visits, the 17 AIDS patients in Lexington were scheduled to be seen by a physician every 6 months, unless they had symptoms that required immediate treatment. Springfield and Butner had sufficient staff to perform monthly assessments of their 40 and 14 AIDS patients, respectively.

Medical centers are also required to have infection-control programs in place to identify and control the spread of infectious diseases. All three centers we visited had an infection-control program and a person assigned to conduct the program. However, the centers varied in their effectiveness in treating tuberculosis. Tuberculosis is a major problem in correctional facilities because it occurs three times more often than it occurs in the community. To illustrate, outbreaks of tuberculosis have recently occurred in some state prison facilities, and some cases have surfaced in BOP correctional facilities. Inmates who have a positive tuberculosis test and fail to complete the medication treatment risk developing active tuberculosis disease, which can be transmitted to other inmates and staff. Lexington was the first medical referral center in the BOP system to perform annual tuberculosis testing of all inmates and track inmate patients' compliance with treatment. Specifically, in the summer of 1992, the center hired two Public Health Service (PHS) pharmacy students to review all patient medical records to assure that every inmate who had

<sup>&</sup>lt;sup>7</sup>Hypoglycemic reactions result when a patient omits a meal or eats less food than prescribed, receives an overdose of insulin, has a nutritional and fluid imbalance due to nausea and vomiting, or overexerts without compensating with additional carbohydrates.

tested positive for tuberculosis was complying with treatment. They found that about 27 percent of the 135 inmates who had tested positive for tuberculosis were not following their prescribed medical regimen. The center staff immediately initiated a counseling program for these inmates to assure compliance. The compliance rate at the time of our visit 3 months later was close to 100 percent.

The Butner Medical Referral Center began annual tuberculosis testing in March 1993 after an inmate with active tuberculosis went undiagnosed for about 1 month while housed at the center. At Butner, the nurses administer preventive medication to inmates with a positive skin test, observe the inmate taking the medication, and document that the patient took the medicine. In contrast, Springfield tests every 2 years unless an inmate has symptoms of tuberculosis, such as coughing and fever. Further, the Springfield center relies on the patients to take their prescribed preventive medications and does not rely on direct observation by the staff. Staff become aware of noncompliant inmates when their prescriptions are not refilled at appropriate times or during staff inspections of inmates' cells.

#### Physician Assistants Lack Credentials and Adequate Supervision

Many physician assistants in BOP lack generally required education and certification and are not receiving adequate supervision from physicians. At the three centers we visited, 11 of 27 physician assistants had neither graduated from a program approved by the American Medical Association (AMA) nor obtained certification from the National Commission on Certification of Physician Assistants. However, BOP's policy does not require physician assistants to be certified by the National Commission on Certification of Physician Assistants or to have graduated from a program approved by the AMA. This policy is in contrast to the community's, Department of Veterans Affairs', and military services' requirements that physician assistants have approved education or certification before they can be hired.

Further, physicians at these centers told us that they lack the time to adequately supervise physician assistants. This situation occurred because centers either did not have sufficient medical physicians or did not assign a sufficient number of these physicians to supervise their physician

<sup>&</sup>lt;sup>8</sup>Thirty-four of the 66 physician assistants working in BOP at its seven medical referral centers have not met either of these requirements. Of these individuals, 28 were foreign medical school graduates. These providers are not licensed to practice medicine in the United States, but current Office of Personnel Management regulations permit them to work as physician assistants in federal facilities.

assistants. As a result, inmate patients were at risk of not receiving quality medical care.

BOP'S Medical Director agreed that physician assistants should have approved education or certification. But he believes that adopting more stringent hiring criteria for BOP'S physician assistants would limit BOP'S ability to hire such personnel because its current salary structure is significantly lower than what certified personnel can obtain in the private sector.

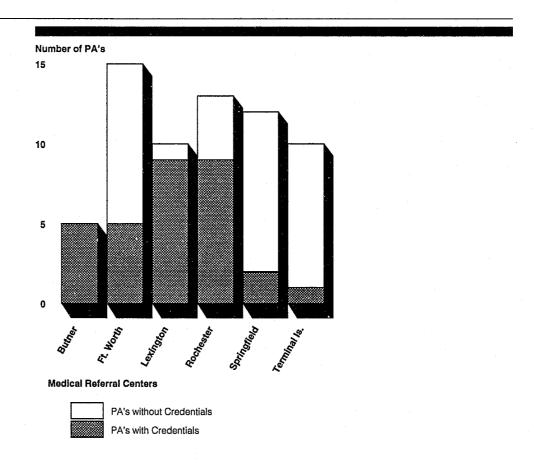
BOP's credentialing policy on its physician assistants was formulated using a 1970 Office of Personnel Management (OPM) qualification standard. This standard requires only that a physician assistant receive training from a nationally recognized professional medical group, such as the AMA, or by a panel of physicians established by a federal agency for this purpose. But the Chief of OPM's Standards and Qualifications Branch told us that the qualification standards are minimal federal hiring standards. The standard was issued on an interim basis and was to be examined further as the physician assistant occupation evolved. On August 2, 1993, the Chief of the Standards and Qualifications Branch at OPM told us that he hoped a revised standard would be issued in 1993. He explained that OPM has been conducting an overall study of medical occupations and that no changes will be made to the 1970 standard until BOP and the military services submit comments.

In June 1991, a consultant<sup>9</sup> expressed concern to BOP that its physician assistants lacked proper qualifications for the position and that BOP physicians were not providing them with adequate supervision. Specifically, he noted that uncertified physician assistants were providing the bulk of health care to inmates and that the ratio of attending physicians to physician assistants was suboptimal. The consultant was also concerned that the training physician assistants received was inconsistent and might even have been inappropriate for the type of care and treatment they provided to inmates. He recommended that more physician positions be authorized to improve overall quality of care. But as of July 1993, BOP had not been able to fill all the physician positions that were authorized in any of the centers we visited.

<sup>&</sup>lt;sup>9</sup>Dr. Joseph A. Leiberman III, M.D. and M.P.H., Professor and Chairman, Department of Family and Community Medicine, Medical Center of Delaware, Wilmington, Delaware.

We corroborated the consultant's findings concerning both credentials and supervision. Figure 2 shows the number of physician assistants at six centers and the number who lacked credentials.

Figure 2: Physician Assistants (PA) With and Without Credentials at Six BOP Medical Centers



Physicians at Lexington told us that they lacked sufficient time to review charts for patients seen by physician assistants and as a result, they had not reviewed any. At Butner, physicians reviewed some charts, but told us that physician assistants needed more supervision. As a result of our visit, Butner's Warden authorized an additional physician to be hired to provide better supervision for physician assistants. But as of July 29, 1993, the position was not filled. Bor's Health Services Manual states that supervision of physician assistants can be achieved through a daily physician review of at least 10 charts of patients seen by physician

assistants. However, a medical records audit conducted by Springfield staff in April 1992 found that over a 1-month period the physician responsible for the outpatient department reviewed only 14 of 90 charts for patients seen by physician assistants.

In addition to providing inadequate supervision to physician assistants, physicians at the Springfield facility did not always provide appropriate clinical support to these personnel. According to hospital policy, physicians are required to respond to physician assistants' requests for consultations on patients' conditions within 10 days of receipt of the request. In an August 1992 memorandum to the center's Clinical Director, the Assistant Clinical Director stated that physician assistants did not believe that they were receiving timely responses to their requests for physician consultations.

Medical Referral Centers Are Not Using Quality Assurance Data to Improve Care Each of the three centers we visited had quality assurance programs that were identifying actual and potential quality-of-care problems. But only the Butner Medical Referral Center has a program in place that was addressing these problems. At the Springfield Medical Referral Center, neither the physicians nor the other health care providers were accepting responsibility for the problems identified by the quality assurance personnel. And at Lexington, insufficient numbers of clinical staff prevented the quality assurance coordinator from taking corrective action on identified problems. As a result, quality-of-care problems continued to occur in both centers.

In May 1992, a consulting team visited Springfield and reported that the center's quality management process had resulted in little evaluation, action, or followup for the data collected or problems identified. The team also found little interdisciplinary cooperation or collaboration among nurses, the quality assurance staff, and the physicians. The consulting team concluded that until quality improvement was considered everyone's responsibility, the system would not function properly.

BOP's quality management process includes internal and external reviews of mortality cases. The effectiveness of these reviews is limited because (1) medical center reviewers make few recommendations and (2) the external reviewer's findings are seldom communicated in writing to the centers for corrective action. Our review of 44 mortality cases over the period October 1990 to September 1992 at Springfield showed that the clinical staff who reviewed the mortality cases limited their review to

determining whether the death was preventable or not. They did not address whether the adverse outcomes that occurred were associated with quality-of-care problems and what corrective action could be taken to prevent recurrence of the problems. We identified quality-of-care problems in 12 of these cases. We believe that in these cases, corrective actions should have been implemented to improve future patient care. The following example is a case in point:

• A 47-year-old patient was uncooperative upon admission to the psychiatric unit at Springfield Medical Referral Center in May 1991, making it impossible for clinical staff to take his medical history or perform a detailed physical examination. Nursing notes indicated that the patient was cooperative as of December 1991. The patient saw a physician assistant on April 14, 1992, with shortness of breath and a high pulse rate. An electrocardiogram test<sup>10</sup> of his heart showed abnormalities and scar tissue, indicating a previous heart attack. As a result of these findings, the physician assistant referred the patient to a physician for further follow-up care. On April 16, 1992, a general practice physician saw the patient but did not perform a complete history and physical or cardiac workup, nor did he order medications for the patient.

During the next few weeks, the patient's condition worsened, and he was seen by a physician assistant on May 21, 1992. The physician assistant ordered a repeat electrocardiogram, a chest X-ray, and other cardiac tests. The chest X-ray showed that the patient's heart had increased significantly in size and he had an increased amount of fluid in his lungs. The physician assistant performed a detailed history and physical on the patient on May 22, 1992. He believed the patient could be in cardiac failure and notified the general practice physician. The physician saw the patient that day. But despite his worsened condition, the patient was not transferred from the psychiatric unit to the medical acute care unit until May 28, 1992. The patient died of cardiac complications on May 29, 1992.

The mortality review committee found that the patient had not received a cardiac evaluation, but it had no recommendations on this case. Additionally, it did not comment on the 1-year delay in taking a detailed patient history and conducting a physical examination. These situations are in violation of BOP policy, which requires that both be performed within 14 days of admission into a center. Instead, the history and physical examination were performed on May 22, 1992, 7 days before the patient died. Further, the committee made no recommendations about when a

<sup>&</sup>lt;sup>10</sup>An electrocardiogram test is performed to diagnose cardiac disease and abnormal cardiac rhythms.

patient should be transferred to a medical acute care unit. The center should have (1) taken action to assure staff adherence to BOP policy concerning examining newly admitted patients, (2) developed a standard operating procedure for when to transfer patients to the medical acute care unit, and (3) established protocols for closely monitoring patients with both physical and mental health problems.

The failure of medical center staff to deal with identified quality-of-care problems was also occurring in the area of clinical privileging. 11 Our review of the files of physicians currently employed at the three centers we visited showed that the physicians were qualified to perform the work they were assigned. But at Springfield, often no action was taken against physicians once performance problems were identified. For example, the patient care practices of two physicians had been repeatedly challenged by nurses, physician assistants, and the medical services quality assurance committee from 1990 to 1992. In one case, the medical staff quality assurance committee recommended that (1) an entry be made in a physician's file indicating that he had failed to consult with a specialist to make a cancer patient's remaining days more comfortable 12 and (2) the case be referred to the medical executive committee for review. The medical executive committee concluded that the care provided by this individual was not "standard of care normally practiced." The Joint Commission also had identified a lack of effective pain management of patients as a problem during its February 1993 accreditation survey of Springfield.

We found that one of the aforementioned physicians was involved in three other incidents involving quality-of-care issues. However, no action was taken to prevent these problems from recurring or to restrict the physician's privileges. The physician was still employed and in good standing at the center.

Butner and Lexington had not identified any performance problems with their physicians. Physicians employed at the three centers we visited all had appropriate credentials and were educationally qualified to perform the work they were assigned. Further, we examined the credential files of

<sup>&</sup>lt;sup>11</sup>Privileging is the process of evaluating physicians' clinical experience, competence, ability, judgment, and health status when granting them permission to treat certain illnesses and perform certain medical procedures.

 $<sup>^{12}</sup>$ The cancer had spread throughout the patient's body, and he was unable to move his extremities. His primary pain medication was Motrin.

all physicians at each of these centers and found that BOP personnel had verified all physicians' credentials.

Lack of sufficient staff to perform quality assurance activities can inhibit the effectiveness of a quality assurance program. The Lexington Medical Referral Center had one quality assurance coordinator who was also responsible for infection control and risk management. In addition, she was the center's only anesthetist. These and other duties limited the time she could give to quality assurance issues. As a result, the quality assurance programs at this center suffered. For example, our review of patients' charts indicated that of 54 inmates who had abnormal mammograms, 26 left the medical referral center without being informed that they had an abnormal test result that required follow-up care and monitoring. We discussed this situation with the quality assurance coordinator and although staffing was still a problem she immediately made this a priority and began sending letters to inmates with known addresses telling them of their abnormal test results. However, when she performed this duty, work in other quality assurance areas had to be deferred.

In contrast to the Springfield and Lexington Medical Referral Centers, the Butner quality assurance program was identifying quality assurance problems and taking action to resolve them. Quality assurance activities at this center were used to help center management evaluate the quality of care provided and identify areas needing improvement. These activities included studying the effects of specific psychiatric medications, setting limits on lengths of stay and requiring justification when these limits were exceeded, and performing random peer reviews of individual cases and taking corrective action to prevent recurring problems.

Clinical and other staff, such as counselors and case managers, work together to serve as the quality assurance committee, evaluate clinical indicators, and determine acceptable thresholds for adverse patient outcomes. Outcomes that exceed established thresholds are reviewed to identify preventable problems, and corrective action is taken to lessen the chance that they will recur. In addition, adverse events that appear to be unpreventable are analyzed, and areas for improvement are identified and reported to staff in order to minimize future occurrence. For example, when an inmate died in December 1991 from a cardiac condition, the Associate Warden for Health Services established a mortality review committee to investigate his case. The committee found that the patient could have been evaluated more thoroughly when he first reported his

symptoms. The committee indicated that the staff should have continued close monitoring of the patient even after his condition responded to treatment. The committee made several recommendations, including future staff training in identifying and treating impending heart attacks to prevent similar occurrences.

#### BOP Plans Major Hospital Acquisition Program Without Fully Assessing Its Needs

BOP recognizes that its health care costs are escalating. Additionally, its capacity to provide necessary in-house care with existing staff levels is at risk. Because of recruitment and retention problems, several of BOP's medical referral centers have been unable to consistently provide care for patients' health needs. Routine care is sporadic, emergency cases must be transported to outside hospitals and providers, and each of the centers we visited must contract out all work needed for most specialties. To help cope with this situation, BOP is planning a major hospital acquisition program for each of its six regions. Under this program, BOP plans to either construct new hospitals or acquire closed military hospitals. But BOP has not fully assessed whether inmates' medical needs justify this acquisition program nor has it planned how to recruit and retain the clinical staff necessary to operate these facilities. Further, BOP has not fully explored cost-effective alternatives to providing necessary medical care to inmate patients.

In fiscal year 1992, BOP spent \$68 million on care provided in community facilities, including \$12.7 million for correctional officers to escort patients to and from outside medical appointments. This represents an increase of \$14.5 million over the amount paid in fiscal year 1991 for outside care. But BOP did not maintain sufficiently detailed accounting records to inform management about the extent and the types of care they were acquiring under contract. In 1992, BOP's Medical Division proposed awarding a contract to a private consultant to determine the extent of its outside medical needs and costs. This proposal was not approved because BOP's Executive Committee determined that funds were not available. As a result, BOP cannot accurately plan for the future medical needs of its inmate population.

BOP has not fully determined its medical needs. In fact, in 1989, a consultant hired by BOP concluded that BOP did not have a well-defined medical mission and had not measured inmates' needs for clinical services.

Despite this lack of data, BOP is considering acquiring several new hospitals to care for its patients. One option being considered is to build an acute tertiary care hospital in each of BOP's six regions. Each hospital would have 500 beds and cost about \$100 million to construct and equip. Currently, BOP has received funding for one new hospital in Butner, North Carolina, to replace the current hospital there. As an alternative to building the remaining five acute tertiary care hospitals, BOP is trying to acquire selected closed military hospitals and use them for its own health care needs. BOP officials told us that they have acquired the hospital at Fort Devens in Massachusetts and hope to obtain hospitals at Carswell Air Force Base in Texas and at March Air Force Base in California. However, it is unclear what services BOP will provide at these hospitals and how it will staff them.

In our view, an alternative to hospital construction or acquisition that BOP could consider is to acquire medical services that it cannot provide from a source outside the prison system. At least 15 states provide all or part of their health care to inmates through private contractors. For example, in October 1992, the Missouri Department of Corrections entered a contract with a private contractor to provide health care for its 14,000 or more inmates. This approach was taken because the state could not recruit sufficient numbers of medical staff to provide necessary care within the prison system. Missouri's Health Services Assistant Director told us that contract care assures the department that certain staffing levels will be consistently maintained and that physicians will provide inmates with needed treatment and periodic examinations. Before this decision, Missouri was encountering staffing problems similar to that of BOP's hospital in Springfield, Missouri. In 1992, the contractor began providing all health care for about \$1,336 a year per patient (about 14,000 inmates) or \$18.7 million. 14 In comparison, BOP spent about \$2,500 a year for each inmate in 1992 or \$198 million. Another option that BOP could consider is telemedicine. This consists of using electronic voice, video, and data transmission technology to allow consultant physicians to advise on-site clinicians on patient treatment. For example, a cardiologist could review electrocardiogram results to determine whether a patient's cardiac condition warrants emergency treatment. Using this technology, BOP could reduce consultant costs, increase available professional resources, and eliminate the need for escorting an inmate to an outside provider or health

 $<sup>^{13}</sup>$ Butner's current medical beds will be used for chronic patients who require minimum care or those who no longer need medical care.

 $<sup>^{14}</sup>$ If Missouri's number of inmates exceeds 14,000, the cost for each additional inmate is about half of the base cost.

care facility. BOP could also use this technology to link medical staff in its medical referral centers with clinical providers in its other correctional facilities. This would provide timely assessments and treatment plans and reduce unnecessary transfers of inmates whose conditions are not serious to the medical referral centers or to outside hospitals.

#### Conclusions

To assure that it operates an efficient, effective medical program for its inmate population, BOP needs to determine (1) what the health care needs of its inmate population will be over the next 5-10 years, (2) what in-house services it should provide to its inmate patients, and (3) how it will obtain the employed or contracted staff needed to provide medical services. But BOP has not planned for the future medical needs of its patient population or fully evaluated all cost-effective alternatives for providing necessary medical care. Thus, in our view, BOP's current concentration on acquiring or constructing new hospitals needs to be reevaluated.

Currently, BOP does not have the capacity to provide appropriate medical and psychiatric care to inmates at the three centers we visited because it has been unable to recruit and retain qualified health care staff. Further, staffing shortages at these medical referral centers are chronic and show no signs of improving. This, in turn, adversely affects quality assurance programs, which rely on staff support for effective implementation. In addition, physician assistants, who are relied upon to provide a significant amount of primary care to patients, are not as well trained or supervised as they should be. As a result of these problems, patients are and will continue to be at risk of receiving poor care.

#### Recommendations

We recommend that the Attorney General require the Director of BOP to do the following:

- Prepare a needs assessment of the medical services its inmate population requires and determine what medical services it can efficiently and effectively provide in-house.
- Determine the most cost-effective approaches to providing appropriate health care to current and future inmate populations.
- Revise BOP hiring standards for physician assistants to conform to current community standards of training and certification.
- Reemphasize to the wardens of medical referral centers the importance of taking corrective action on identified quality assurance problems.

# Agency Comments and Our Evaluation

In a letter dated December 10, 1993, the Assistant Attorney General for Administration, Department of Justice, stated that BOP found our report to be informative and comprehensive. However, he also stated that BOP strongly disagrees with our conclusion that BOP does not have the capacity to provide appropriate medical and psychiatric care to the inmate population at the three centers we visited. BOP believes that while more staff and more resources to provide health care are desirable, it is providing quality care consistent with community standards with the staff it has at its disposal.

Despite its objection to our conclusion about the care it is able to provide to inmates in the facilities we visited, BOP agreed with our specific findings. Further, the Assistant Attorney General stated that action will be taken on two of our four recommendations. BOP believes that the intent of our remaining two recommendations is being dealt with through existing systems and plans. (See app. V.)

BOP's disagreement with our conclusion is not justified by the facts. BOP acknowledges that it has not been able to recruit and retain sufficient medical staff to adequately staff the three medical referral centers we visited. Further, it agrees with our findings that there are (1) insufficient nursing staff at each of the centers visited; (2) insufficient numbers of psychiatrists at the Springfield and Lexington centers; and (3) female inmates in Lexington who were not receiving timely pelvic examinations and Pap tests upon incarceration because of staff vacancies in positions for a gynecologist, physician assistants, and nurses. In his response to this report, the Assistant Attorney General further stated that BOP has difficulty in recruiting all ranges of professional staff in the Lexington area because of its inability to compete with salary ranges offered by community-based organizations. Each of these conditions form the basis for our conclusion that BOP does not have the capacity to provide appropriate medical and psychiatric care to the inmate population at the three centers we visited.

In responding to our recommendation that BOP needs to prepare a needs assessment of medical services that its inmate population requires and determine what it can effectively provide in-house, the Assistant Attorney General stated that BOP has developed a comprehensive data collection and utilization management system to plan for future medical referral center needs. In his opinion, this system is growing in sophistication and will give BOP the capability to determine its health care needs. Thus, in his opinion, our recommendation has been satisfied. We disagree. BOP's system does not provide the type of information needed to make decisions

on what services can be efficiently and effectively provided in-house. Such data would include information such as an inmate's condition and the type and amount of medical care the patient needs. Without this information BOP cannot accurately determine appropriate staffing needs, and such information is necessary to determine the extent to which care can be provided in-house.

The Assistant Attorney General also stated that the intent of our recommendation that BOP determine the most cost-effective approaches to providing appropriate health care to current and future inmate populations is being met through BOP's Long Range Medical Facilities Plan. This is partially true. According to the facilities plan, the medical referral centers will contract with outside services for as many technologically advanced procedures as possible, consistent with custody and cost considerations. However, we also believe that BOP should be considering contracting out when it cannot provide basic services effectively. In its long-range plan, BOP states that its medical referral centers will, at a minimum, provide such basic services as obstetrics, gynecology, and cardiology. But we found that BOP does not have sufficient staff to provide in-house the basic services required by the facilities plan. In its planning, BOP must recognize that this problem exists and develop appropriate alternatives. Thus, we believe that our recommendation needs to be given further consideration.

The Assistant Attorney General did address one aspect of the contracting out issue. Specifically, he cited a May 1990 study by Abt Associates that concluded that privatization of medical referral centers was not feasible from either a management or cost-effectiveness perspective. But privatization of medical referral centers is only one aspect of the contracting option we are recommending that BOP consider. We believe that BOP should explore the pros and cons of contracting out any element of medical care that cannot be effectively provided within its medical referral centers. In this respect, the Abt findings are similar to our findings. Abt concluded that contracting out of certain elements of medical care may in fact help relieve a center's inability to achieve full staffing levels. Abt also concluded that fully staffing the Lexington and Springfield centers, by means of either contracted or government employees, will probably enhance the treatment of medical/surgical patients at these facilities.

The Assistant Attorney General agreed with our recommendations that

- (1) BOP's hiring standards for physician assistants be revised and
- (2) corrective actions on identified quality assurance problems be

reemphasized to the wardens of medical referral centers. In both areas, BOP agreed to take corrective action to resolve the problems.

Unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days. At that time, we will send copies to the Attorney General and the Director of BOP and interested congressional committees. We also will make copies available to others upon request. If you have any questions regarding this report, please contact me at (202) 512-7101. Major contributors to this report are listed in appendix VI.

Sincerely yours,

David P. Baine

Director, Federal Health Care

Havid P. Bains

Delivery Issues

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#### Abbreviations

AIDS	acquired immunodeficiency syndrome
AMA	American Medical Association
BOP	Bureau of Prisons
JCAHO	Joint Commission on Accreditation of Healthcare
	Organizations
OPM	Office of Personnel Management
PA	physician assistant
PHS	U.S. Public Health Service
RN	registered nurse
VA	Department of Veterans Affairs

## Objectives, Scope, and Methodology

In a letter dated March 23, 1992, the Chairman of the Subcommittee on Intellectual Property and Judicial Administration, House Committee on the Judiciary, requested that we investigate the medical care provided to federal inmates to determine whether (1) quality of care problems were widespread and (2) the Bureau of Prison's medical delivery system, including its quality assurance program, was functioning well. After consulting with Subcommittee staff, we agreed to focus our review on the following four issues:

- Are inmates with special medical needs—including women, psychiatric patients, and inmates with chronic medical conditions—receiving the care they need?
- Are BOP physicians and other health care providers qualified to perform the services they are assigned?
- Does BOP have quality assurance systems in place that detect problems with health care, and is corrective action taken to prevent similar problems?
- Are alternative approaches available to meeting inmates' medical needs?

To follow up on allegations of problems with BOP health care, we reviewed files of correspondence sent to the Subcommittee from inmates and their friends and relatives, reports and other documentation prepared by the Joint Commission on the Accreditation of Healthcare Organizations and the American Correctional Institute, a transcript of a 60 Minutes television program on BOP's medical care for inmates, and inspection reports prepared by the Offices of Inspector General for the Departments of Justice and Health and Human Services who reviewed BOP facilities. We also interviewed a reporter from the Dallas Morning News who wrote a series of articles on the quality of medical care provided by BOP.

To identify and evaluate BOP policies and procedures governing the medical care provided to inmates, we visited BOP's central office and its regional offices in Annapolis Junction, Maryland, and Kansas City, Missouri. At BOP's central office, we interviewed officials from the Medical Division, the Administrative Division, the Program Review Division, and the Office of General Counsel. We also reviewed documents related to health care budget and costs, consultant reports concerning current and future health care operations, and plans for constructing new BOP hospitals. At the regional offices, we interviewed regional health services administrators and reviewed reports submitted by medical referral centers as well as those prepared by regional staff on the results of their evaluations of medical referral centers.

Appendix I Objectives, Scope, and Methodology

To assess the quality of the health care delivered to patients with special needs, actions taken on identified problems, and the effectiveness of quality assurance programs, we met with the wardens; medical, surgical and psychiatric physicians; nurses; technicians; and other health care staff. We also met with correctional and administrative employees at medical referral centers in Butner, North Carolina; Lexington, Kentucky; and Springfield, Missouri. We reviewed documents related to budget and costs, staffing, quality assurance plans, pharmacy operations, laboratory operations, and inmate complaints. In addition, we reviewed minutes of meetings of the following center committees: medical executive, medical staff, quality assurance, infection control, nursing, utilization management, and pharmacy. We also reviewed selected documents from the other four medical referral centers.

To determine if the qualifications of medical staff to perform assigned work were being properly evaluated, we interviewed cognizant staff and reviewed the credentialing and privileging files of physicians and physician assistants. We determined whether the centers had verified physicians' and physician assistants' educational and professional credentials and whether quality assurance data were present in the providers' files at the time privileging decisions were made. We also reviewed any actions taken when problems were identified.

To evaluate care provided to inmates with special needs, such as chronic or psychiatric conditions, we reviewed selected patient files of inmates who died between October 1, 1990, and September 30, 1992. We also reviewed files of selected female inmates who had abnormal results on either their Pap tests or mammograms. We then discussed these cases with cognizant staff.

We performed our work between April 1992 and August 1993 in accordance with generally accepted government auditing standards.

### Butner Medical Referral Center

#### Mission of Referral Center

The primary mission of the Bureau of Prison's medical referral center at Butner, North Carolina, is to provide psychiatric diagnostic and treatment services to male inmates with minimum to medium security classifications. The patients being treated have either been convicted of a crime or are categorized as forensic. Forensic patients have been accused of crimes and were referred to Butner to determine if they are mentally competent to be tried in a federal court.

In addition to psychiatric care, the Butner staff and consultants also provide inmates with outpatient medical care. Inmates who develop acute medical conditions that require inpatient care are transferred to other BOP medical referral centers or to a community hospital.

### Location and Condition of Facility

The Butner federal correctional institution opened in 1976 as a psychiatric referral center. The eight housing buildings are small, open units, which are mostly unlocked during the day, allowing considerable intermingling of patients, other inmates, and staff.

One of the buildings housing mental health patients contains a seclusion admission area with an officers' station, 10 standard individual cells, 6 double cells, and 4 observation cells. These latter cells have large windows that allow observers to continually observe the occupant and are used mainly for patients considered to have the potential to commit suicide. Because these patients must be watched 24 hours a day (with observation notes written and initialed every 15 minutes), Butner uses inmate "companions" to observe the potential suicide patients. These companions are inmates who have been screened and trained for this work, and a psychologist supervises them. The remaining three buildings contain open housing for psychiatric patients, the outpatient clinic, and health care offices.

# Number of Inmates and Patients Served

In July 1993, the Butner correctional facility housed approximately 800 male inmates. Of these inmates, 180 were mental health inpatients, about 100 were in a substance abuse program, 24 were in the sex offender treatment program, 20 were in outpatient therapy for sex offenses, and 50 were in outpatient psychiatric treatment. At that time, about 300 inmates, including some of the mental health patients, required medical care for chronic medical conditions, such as diabetes, hypertension, cardiac conditions, or outpatient psychiatry. They were seen in monthly clinics on

Appendix II Butner Medical Referral Center

an outpatient basis by physicians and physician assistants. The medical staff also served an adjacent BOP camp housing 250 inmates.

#### Number and Type of Medical Beds

The Joint Commission on Accreditation of Healthcare Organizations rates the Butner medical referral center as a 180-bed forensic inpatient hospital.

#### Number and Type of Staff Positions Authorized and Filled

In July 1993, Butner's medical referral center had 91 authorized health care positions, including 9 psychiatrists, 4 medical physicians, 1 optometrist, 2 forensic fellows, 15 8 physician assistants, 15 nurses, 2 dentists, 2 pharmacists, 5 psychologists, 1 quality assurance coordinator, 5 medical records staff, 17 clerical staff, and 20 other health care staff. Nine positions were vacant, including a medical physician, 2 psychiatrists, a psychologist, 2 nurses, a dental assistant, a physician assistant, and a vocational rehabilitator.

#### Staff Organization

The Associate Warden for Health Services at Butner is responsible for all health care staff plus other staff who work in units housing psychiatric patients. This arrangement differs from other BOP organizational structures, where psychologists, unit and case managers, and counselors report through chains of command other than health services. The Associate Warden believes that this integration of psychiatric medicine, physical medicine, and unit management helps ensure commonality of purpose, reduces communication problems, and improves patient progress.

Butner uses a team approach to patient care. Each patient is assigned to a psychiatrist and a psychologist who write progress notes daily for seclusion patients, weekly for assessment and short-term patients and monthly for long-term and management cases. In addition, each seclusion patient meets weekly with the treatment services teams, consisting of psychiatrists, psychologists, a nurse, the recreation therapist, a social worker, and case managers.

Generally, the doctors and psychologists work the 7:30 a.m. to 4:00 p.m. shift, although at least one doctor usually works to about 9:00 p.m. In addition, at least one physician works Saturday and Sunday day shifts.

<sup>&</sup>lt;sup>15</sup>For several years, Butner has employed psychiatrists and psychologists in their last year of residency as "fellows" in their specialty. This program helps augment its staff, advertise the center in a positive manner, and recruit permanent staff. As of July 1993, Butner had 2 forensic fellows working in the center and counted as part of their authorized positions.

Appendix II Butner Medical Referral Center

Further, one psychiatrist is always on call. At a minimum, one physician assistant and one nurse cover the four mental health buildings on the midnight to 8:00 a.m. shift.

## Lexington Medical Referral Center

#### Mission of Referral Center

The medical referral center at Lexington, Kentucky, provides primary medical and surgical care; chronic and hospice medical care; and acute, diagnostic, and chronic psychiatric care exclusively to female inmates. Care is provided for seriously ill patients, and most surgeries and all births take place in community hospitals.

# Location and Condition of Facility

The federal correctional institution at Lexington, Kentucky, consisting of several two- and three-story buildings surrounded by a wire fence, was designated as a medical referral center in 1990. The buildings were built around 1934 and are currently in need of repair and renovation. One building contains most of the medical facilities, including the inpatient medical and psychiatric units, outpatient clinics, laboratory, pharmacy, dental clinic, and operating suite.

# Number of Inmates and Patients Served

The Lexington correctional institution houses 1,954 female inmates. The center has a 22-bed acute care unit with an average census of 15. This unit also has a recovery and stabilization room, and 24-hour nursing and physician assistant coverage. A physician is on call after hours. Patients requiring chronic care are housed in two extended care units, one with 176 beds and the other with 316 beds. Neither unit has nursing coverage. The mental health unit consists of 34 acute care inpatient beds and a 60-bed transitional unit for mental health patients. The transitional unit does not have nursing coverage. In addition, the center has 34 obstetric beds.

BOP assigns all inmates with complicated pregnancies to Lexington for prenatal care. These patients are transferred to the University of Kentucky hospital once labor begins to ensure that babies are not born within a prison. Lexington also transfers other patients to community hospitals for medical and surgical care that Lexington is not staffed to provide.

### Number and Type of Medical Beds

The Joint Commission on Accreditation of Healthcare Organizations rates Lexington as a 56-bed medical, surgical, and psychiatric hospital.

### Number and Type of Staff Positions Authorized and Filled

In July 1993, Lexington was authorized 126 health care staff, including 8 physicians (one of which is a clinical director), 4 psychiatrists, a surgeon, 43 nurses, 12 physician assistants, 4 dentists, 4 pharmacists, 3 psychologists, 10 medical records staff, and 37 other clinical staff. At that time, 32 positions were vacant, including 3 medical physicians (one is the

Appendix III Lexington Medical Referral Center

clinical director and the other two are the obstetrics and gynecology physicians), 1 psychiatrist, 14 nurses, 1 physician assistant, and 13 other health care staff. The following specialists were working at Lexington during this time: 1 family practitioner, 2 general practitioners, 2 internists, 1 surgeon, and 3 psychiatrists.

Physicians generally work from 7:30 a.m. to 4:00 p.m., although a physician is on call 24 hours a day. A physician assistant acts as the duty officer each day, responding to calls 24 hours a day throughout the facility.

The facility uses psychology interns from the University of Kentucky and Public Health Service nursing students who are in their last year of nursing school. The latter are used as nurses' aides.

### Staff Organization

All health care staff report to the Associate Warden for Clinical Programs; Lexington does not have an Associate Warden for Mental Health Services. Staff who provide nonmedical inmate services, such as unit managers, case managers, and counselors, report to the Associate Warden for Programs, although they meet regularly with health staff to discuss inmates' progress.

## Springfield Medical Referral Center

#### Mission of Referral Center

The U.S. Medical Center for Federal Prisoners in Springfield, Missouri, is one of the Bureau of Prisons' six referral centers that treat male medical, surgical, and mental health patients.

# Location and Condition of Facility

The Springfield Medical Referral Center is an administrative facility, meaning it is equipped to house inmates of all security levels. It was built about 1933. Inmates live in six connected buildings, each of two or three stories. The medical facilities are concentrated in four of the six buildings. The acute and chronic care medical and surgical patients are housed in units that resemble typical hospital rooms, except that several rooms in each unit have locked doors. These locked cells are used for patients who are (1) dangerous to staff or other inmates, (2) participating in the federal witness protection program, or (3) waiting for their custody status to be determined. The mental health patients are housed in units that resemble typical prison cell blocks with one-man cells. Springfield also has a unit that can contain up to 37 inmates in individual locked cells for disciplinary or protective reasons.

# Number of Inmates and Patients Served

Springfield serves approximately 1,120 inmates, including 439 patients who require medical or surgical care and 294 who need psychiatric care. The medical and surgical care is provided to about 46 acute care patients, 54 patients receiving renal dialysis, and 393 other chronic or recovering patients. The mental health population includes 177 treatment patients and 117 forensic inmates who are being evaluated for their mental ability to stand trial.

#### Number and Type of Medical Beds

The Joint Commission on Accreditation of Healthcare Organizations rates Springfield as a 46-bed acute care and 177-bed mental health hospital.

### Number and Type of Staff Positions Authorized and Filled

In July 1993, Springfield had 279 authorized health care positions, including 5 psychiatrists, 15 medical/surgical physicians, an optometrist, 12 physician assistants, 127 nurses, 9 pharmacists, 12 psychologists, 6 quality assurance staff, 10 medical records staff, and 82 other health care staff. At that time, 18 positions were vacant, including 3 medical physicians, a surgeon, a psychiatrist, a physician assistant, 10 nurses, 1 medical records staff, and 1 other health care staff. The following specialists were working at Springfield: 3 general practitioners,

Appendix IV Springfield Medical Referral Center

4 psychiatrists, 2 internists, 2 neurologists, 1 physiatrist, 1 anesthesiologist, 1 orthopedic surgeon, and 1 chief of health programs.

Physicians and physician assistants are available 24 hours a day. However, physicians generally work from 7:30 a.m. to 4:00 p.m. During the evening and night shifts and on weekends, one physician, one psychiatrist, and one psychologist are on call. Physician assistants are available in the facility 16 hours a day. Nurses are responsible for medical care between 10:00 p.m. and 6:00 a.m. Nursing service is provided 24 hours a day.

#### Staff Organization

The Associate Warden for Medical Services supervises most of Springfield's health care staff, including nurses and technicians. The Clinical Director is responsible for the internal medicine physicians, psychiatrists, surgeons, dentists, physician assistants, the quality assurance coordinator, utilization manager, and infection-control practitioners. The Associate Warden for Mental Health Services is responsible for the psychologists and social workers who work with the mental health patients.

## Comments From the Director, Federal Bureau of Prisons



U.S. Department of Justice

Federal Bureau of Prisons

Office of the Director

Washington, DC 20534

December 10, 1993

David P. Baine
Director, Federal Health Care
Delivery Issues
Human Resources Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Baine:

The following information is being provided in response to your request to the Attorney General, dated November 9, 1993, for comments on the General Accounting Office (GAO) draft report entitled, "Bureau of Prisons Health Care: Inmates' Access to Health Care Is Limited by Lack of Clinical Staff." The GAO evaluated the adequacy of the Federal Bureau of Prisons' (BOP) medical services and the effectiveness of its quality assurance program. This review afforded the BOP the opportunity of having another external evaluation of its delivery of healthcare services to a incarcerated immate population. Many of these inmate patients frequently begin their incarceration in the BOP with significant physical and psychiatric diseases, many times as a result of unhealthy behaviors such as drug abuse, alcoholism, high-risk sexual behavior and violence. Specifically, GAO reviewed the following four issues:

- whether inmates with special medical needs are receiving the care they need;
- whether BOP has quality assurance programs to detect problems with healthcare and take corrective action to prevent similar problems:
- prevent similar problems;
   whether BOP physicians and other healthcare providers are
- qualified to perform the services they are assigned;
  whether BOP is considering the most cost-effective
  alternatives to meet the rising needs of inmates for medical
  services.

The GAO toured and reviewed three of seven Medical Referral Centers (MRC) of the Bureau. The Bureau MRCs provide inpatient, outpatient, psychiatric, chronic, and tertiary care to approximately 78,000 inmates housed in 71 correctional facilities throughout the United States. All seven of the Bureau MRCs are fully accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The GAO visited the Federal Medical Center (FMC) at Lexington, Kentucky; the Federal Correctional Institution (FCI) at Butner, North Carolina; and the Medical Center for Federal Prisoners (MCFP) at Springfield, Missouri.

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See p. 21.

However, BOP strongly disagrees with the general finding of GAO that it currently does not have the capacity to provide appropriate medical and psychiatric care to the inmate population. GAO bases its determination on its belief that the BOP has been unable to recruit and retain qualified healthcare staff. Within the context of resource limitations, the BOP continuously and carefully balances the resources it allocates to each of its programs to achieve its overall, coordinated mission of care and custody. While in an ideal setting more staff and more resources to provide healthcare is desirable, BOP believes that it is providing quality care consistent with community standards with the resources available. It requests that GAO modify its draft report consistent with the facts provided below.

BOP found the draft report to be informative and comprehensive.

#### Findings Re Meeting Special Medical Needs of Inmates

The GAO draft report identified that inmates with special needs, including women, psychiatric patients, and patients with chronic illnesses are not receiving all of the healthcare they need at the three MRCs visited.

GAO stated that female patients at FMC Lexington are not receiving timely pelvic examinations and PAP tests upon incarceration.

By policy, BOP requires pelvic examinations and PAP tests on admission. However, as noted in the GAO Report, during the period of the GAO review, these tests were not being done in a timely manner due to a lack of staff. The staff vacancies were in the professions of physician gynecologists and physician assistants, as well as nurses. BOP agrees with this finding for the period of the GAO review.

The BOP has had staff shortages at FMC Lexington, and during these periods of shortages the number of procedures being performed fell behind. However, the Bureau recently assigned an additional 20 positions to FMC Lexington, and as of September 31, 1993, only 18 of 120 healthcare positions at FMC Lexington were vacant. In spite of Federal salary limits, BOP is still able to maintain a quality staff who care about the inmates and their problems. It is difficult to find potential applicants who are willing to work for less compensation, and respect the human and medical rights of the inmate population. Additionally, the BOP has difficulty recruiting all ranges of professional medical staff due to its inability to compete with salary ranges offered by community based organizations. For example, the average starting salary offered in the community to physician assistants is 40 to 60 percent higher than in the BOP.

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See p. 4.

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GAO stated that many psychiatric patients at the MCFP Springfield and FMC Lexington MRCs are not receiving regularly scheduled individual and group therapies. Lack of adequate psychiatrist and psychiatric nursing positions was identified as the cause of this deficiency.

GAO's statement is not entirely correct. The GAO used an "ideal" inmate psychiatric practitioner ratio of 25 to 1 proposed by the Chief Psychiatrist, BOP. However, they applied this ratio based only on the psychiatrist positions without regard for the acuity level or the type of illness involved.

The BOP employs an extensive team approach to treating mental health patients, involving not only psychiatrists, but psychiatric nurses, social workers, medical nurses, psychologists, correctional counselors, case managers, correctional staff, and chaplains. While this team approach is consistent with the community mental health model, the GAO correctly noted an insufficient number of psychiatrists at the MCFP Springfield and FMC Lexington MRCs. The BOP continues to actively recruit for these positions.

GAO stated that "some" inmates with chronic conditions are not receiving follow-up care. The GAO interprets follow-up care as monitoring by a nurse in a chronic care unit.

The BOP policy on chronic care monitoring is specific and appropriate. All chronic care patients are identified upon incarceration or upon development of a chronic disease. Once identified, inmates are regularly scheduled in chronic care clinics which are held at least four times per year. Additionally, inmates have access to healthcare professionals on a daily basis through sick call visits and as needed on an emergency basis 24 hours a day.

BOP believes it exceeds the community standard. Chronic care patients in the community are treated at their physicians' offices or through hospital-based outpatient facilities while continuing to live in their homes. Patients in the community report to their physician provider as needed for treatment of chronic illnesses. Twenty-four hour nursing staff coverage to monitor chronic care patients is neither a community standard nor cost effective.

As noted above, BOP policy requires those inmates identified as having chronic care conditions to be evaluated by a physician at least four times a year. BOP agrees with the GAO finding that not all chronic care patients at FMC Lexington and MCFP Springfield were monitored according to policy. BOP continually tracks institution data and staff to ensure chronic care patients are monitored at least four times a year. Due to staffing constraints, BOP is not always able fully to comply with its policy. However, these patients have the capability and responsibility to request follow-up care as needed, consistent

See p. 9.

See p. 5.

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with the community standard.

The GAO states that there is insufficient nursing staff at the MRCs.

BOP concurs with this finding. Each MRC utilizes a different classification system in evaluating its nursing requirements. As a result, the MRCs are utilizing differing parameters in determining their needs. In addition to the recruitment difficulties already noted, the Bureau needs to reevaluate its nurse staffing practices throughout BOP. By doing so, nurse utilization can be coordinated and more effectively managed. The first step of the Bureau in addressing this issue will be to develop or acquire a standard patient care classification system for all MRCs. This will result in a staffing system based upon inmate healthcare needs and not institution staffing patterns.

GAO stated that the three MRCs varied in their approach to infection control. GAO provides no explanation or clarification of that assertion.

The BOP has always had an infection control policy in place for the MRCs. This policy is comprehensive and continually updated in conjunction with the recommendations made by the Centers for Disease Control and Prevention (CDC). As each institution has different missions and inmate populations, the implementation of the CDC guidelines and recommendations will also differ from institution to institution according to local needs. GAO did not identify any deficiencies in the overall infection control program of the Bureau or in the implementation of these policies by the MRCs.

#### Findings Re Ouality Assurance Programs

GAO stated that of the three MRCs only FCI Butner has a quality assurance program in place that is addressing quality assurance problems. At MCFP Springfield, GAO states neither the physicians nor other healthcare providers are accepting responsibility for the problems identified by their quality assurance personnel. GAO states the reason for this lack of involvement on the part of healthcare staff is understaffing. GAO cites two immate deaths, one at MCFP Springfield, the other at FMC Lexington, that allegedly resulted from understaffing.

MCFP Springfield and FMC Lexington, as well as FCI Butner, have comprehensive quality assurance programs in place. The JCAHO evaluated the effectiveness of these programs in February and March 1993 and found them to be in substantial compliance with JCAHO standards. However, JCAHO did identify some deficiencies at MCFP Springfield and FMC Lexington in medical staff monitoring of certain patient care components such as radiology and surgery. Both institutions have submitted corrective plans of action in response to these deficiencies. Lastly, both institutions

See p. 7.

See p. 10.

See p. 14.

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received full JCAHO accreditation.

Additionally, in May 1992, prior to the GAO review, a consulting team visited MCFP Springfield, at the invitation of the Warden, to provide direction for restructuring the quality assurance program at that institution. MCFP Springfield redesigned its quality assurance program and utilized the expertise of the consulting team to refine the program.

Bureau procedure for disseminating external review findings is to transmit to the Regional Director a written notice of any deficiencies. At the same time, a transmittal is sent to the Warden at the MRC for appropriate consultation with the Region. The Regional Directors are responsible for ensuring appropriate corrective action has been taken. GAO has appropriately noted the occasional deficiencies of this system. Therefore, BOP is restructuring its quality assurance notification and review (follow-up) process.

The MCFP Springfield case involving the death of a psychiatric inmate with medical problems was evaluated by an external medical consultant, prior to the GAO review. The GAO concurred with the findings of the consultant of BOP, that this case was incorrectly medically managed. MCFP Springfield recognized the quality assurance problems with this case and instituted corrective actions to prevent further occurrences. Specifically, MCFP Springfield counseled and monitored the physician in question, increased the level of staffing, and implemented a system of medical and psychiatric duty officers.

The FMC Lexington case involved an inmate with chronic medical problems. This case was identified by the BOP and was reviewed by the Bureau's external reviewer prior to the GAO study. The external reviewer indicated an inappropriate level of care was provided. However, there was no method to verify whether the unavailability of resources affected the longevity of this patient. As result of this case and other cases, staffing reevaluations took place which ultimately led to the addition of 20 medical positions at the FMC.

#### Findings Re Oualifications of Health Care Providers

GAO recognized that all physicians employed at the three MRCs have appropriate credentials and are educationally qualified to perform the work they are assigned. GAO also found that BOP personnel had verified all physicians' credentials.

GAO stated that many physician assistants in the BOP lack generally required education and certification, and are not receiving adequate supervision from physicians.

The Office of Personnel Management (OPM) has set minimum hiring standards for physician assistants. While the BOP can exceed the minimum hiring standards, the BOP must consider all applicants

See p. 16.

See p. 11.

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who meet the minimum training and experience standards set forth by OPM. To do otherwise, the BOP would risk legal action from non-selected applicants.

BOP recognizes and supports the need to meet the community standard with regard to physician assistants. Competition for graduates of accredited physician assistant programs is very high, with approximately six potential openings nationally in the private as well as the public sector for every graduate. Due to the salary differentials noted previously, the BOP has had to explore alternative recruiting and retention strategies to meet the physician assistant community standard.

First BOP petitioned for, and acquired, a delegation of authority under Title 38 to permit it in the future to hire certified physician assistants based upon a more competitive salary rate. Second, for the past two years the BOP has been exploring academic relationships with accredited Physician Assistant Training Programs and the American Academy of Physician Assistants throughout the United States to provide additional training and upward mobility for qualified candidates. Recognizing the need to meet the community standard for certification of physician assistants, BOP would provide the opportunity (based on available funding) for a limited number of qualified staff, including foreign medical school graduates currently practicing as physician assistants in the BOP, to attend one of the existing accredited national training programs with the end goal of certification. Finally, the BOP offers an extensive and comprehensive continuing professional medical education program for all of its medical staff.

The GAO statement regarding the lack of adequate supervision from physicians for many physician assistants requires further review by the BOP. The Program Review Division, BOP, has reviewed these MRCs every two years. Program review guidelines are in place that monitor physician supervision of physician assistants. BOP policy requires a physician to randomly or specifically review 10 medical records completed by physician assistants on a daily basis. The Program Review Division reports have confirmed that this is being done at the three MRCs with the exception of less than 100 percent compliance at MCFP Springfield. This inconsistency has been corrected.

Based upon the GAO interviews with physicians and physician assistants, BOP is going to review and reevaluate its program review guidelines and discuss the physician monitoring of physician assistants with both the physicians and the physician assistants at the MRCs.

The Veterans Administration authority to hire medical professionals, 38 U.S.C. §7401, et seq., allows for higher salaries and less competitive hiring procedures.

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Findings Re Cost Effective Alternatives for Inmate Care

GAO stated that the BOP is planning a major hospital acquisition program without fully assessing its needs. Additionally, GAO notes the BOP is considering the construction of six large acute, tertiary care hospitals and/or acquiring several military facilities.

Under current population projections, the BOP is planning four new MRCs at this time. They include the FMC at Butner, NC; Ft. Devens, MA; Carswell AFB, TX; and a facility in the Western Region. Two of these facilities (Ft. Devens and Carswell AFB) are acquisitions of former military hospitals. These proposed acquisitions are detailed in the BOP Long Range Medical Facilities Plan. The acquisition of surplus military hospitals is seen as an extremely cost effective means of obtaining facilities and as a way to lessen the impact on the community of closing the military facility.

The BOP has a comprehensive and evolving on-line medical data collection system on its nationwide SENTRY information system. The Sensitive Medical Data system uses the ICD-9-CM system to encode all medical encounters of inmates, including specific identification of any tertiary care obtained. One data system module of SENTRY, DGN, monitors patients at the MRCs in accordance with JCAHO definitions of beds. DGN uses JCAHO bed categories to determine the type of patient bed utilization at each of the MRCs. The Medical Duty Status describes the medical duty status of each inmate and identifies inmates covered under the Americans with Disabilities Act. In the near future, additional ICD-9-CM procedure codes will be added. This information system, which is now less than two years old, allows BOP to follow morbidity trends. The system is growing in sophistication and will give the Bureau the capability to determine its health care needs.

The GAO states there is a lack of any data which would support a strategic medical plan. As a result of this, GAO recommends, as an alternative to hospital construction or acquisition, acquiring medical services through private contractors.

As noted above, the Bureau has a comprehensive data collection and utilization management system to plan for future medical and facility needs. In addition, the BOP has for several years had a Long Range Medical Facilities Plan. This plan identifies current

See p. 18.

See pp. 21 and 22.

See pp. 18-19.

See pp. 21 and 22.

<sup>&</sup>lt;sup>2</sup> International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM). The ICD-9-CM, a classification system used in health care facilities, is primarily a universal classification system for grouping illnesses. Its secondary purpose is for use in hospital disease indexing.

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resources, future growth, and resources needed to meet that growth.

In May 1990, an independent study, <u>Privatize Federal Prison Hospitals? A Feasibility Study</u>, requested by the Office of Management and Budget, was conducted by Abt Associates of Cambridge, MA. The Abt study generally concluded that privatization of the MRCs was not feasible from both management and cost-effectiveness perspectives. The BOP has tried contracting out its health care programs at two facilities, the Federal Prison Camp, Duluth, Minnesota; and the Metropolitan Correctional Center, Chicago, Illinois. Both programs were terminated because of contract management problems and excessive costs.

The BOP is again testing contract services. As part of its effort to deliver efficient and effective health care services, BOP recently awarded a comprehensive physician services contract at FCI Fort Worth, a MRC for chronic care patients. The contract provides for a complete array of specialty physician services to be provided on site by health care providers from the University of North Texas, Health Science Center at Fort Worth within the context of a Bureau directed healthcare delivery system at that institution.

As part of the commitment of BOP to proactive strategic planning, it has regularly reevaluated its healthcare needs for the immate population for the future and the resources that will be required to meet this challenge. As the medical needs of BOP immates change, BOP determines what impatient and outpatient medical requirements will be necessary to provide the immate population with a community standard of medical care. Consistent with this standard, the BOP recruits, trains, and contracts for the needed medical staff.

#### GAO Recommendations

BOP is taking the following actions on the recommendations contained in this report:

**Recommendation:** Revise BOP hiring standards for physician assistants to conform to current community standards of training and certification.

■ With the implementation of <u>Title 38</u> BOP will be able to revise its hiring standards for physician assistants to conform with current community standards of training and certification.

See p. 22.

See pp. 20 and 22.

Appendix V Comments From the Director, Federal Bureau of Prisons

Mr. David P. Baine

See pp. 20-23.

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**Recommendation:** Reemphasize to the wardens of medical referral centers the importance of taking corrective action on identified quality assurance problems.

■ The restructured quality assurance programs of BOP are addressing the need to reemphasize to MRC staff the importance of taking corrective action on identified quality assurance problems. BOP will continue to closely monitor its quality assurance programs.

**Recommendation:** Prepare a needs assessment of the medical services its inmate population requires and determine what medical services it can efficiently and effectively provide in-house.

■ BOP has developed a comprehensive data collection and utilization management system to plan for future medical and facility needs.

Recommendation: Determine the most cost effective approaches to providing appropriate health care to current and future inmate populations.

■ The Bureau has had for several years a Long Range Medical Facilities Plan.

Thank you for the opportunity to review the draft report. These comments are intended to share additional information with you on our health care programs and to provide you with an alternative perspective and response to the findings contained therein. Should you have any questions, please do not hesitate to contact me.

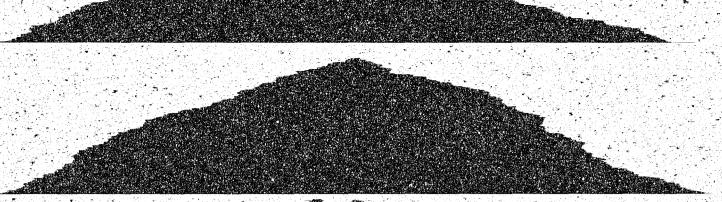
Sincerely,

Kathleen M. Hawk

Director

# Major Contributors to This Report

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