Insular Area Health Care

"At the Crossroads of a Total Breakdown"

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PREFACE

The insular areas are unable to provide comprehensive health care services to their citizens, and as a result, critically ill patients are boarding planes and crossing thousands of miles of ocean for services they are literally dying to receive. With few local specialty physicians and crumbling infrastructures pushed far beyond their limits, insular area public hospitals and clinics struggle to provide patient care. The dedicated, and often creative, hospital staffs work long hours with few supplies, all with the looming reality of their health care systems sinking in debt.

In December 2007, at the annual meeting between the Office of Inspector General and the Public Auditors for insular area islands, the group decided to undertake a joint evaluation to assess the state of health care facilities and the delivery of health services in the U.S. territories and compact nations. We launched this effort in June 2008, conducting interviews of health care officials and providers in seven insular locations. Understanding that an entirely comprehensive and in-depth review was unrealistic for an endeavor with a quick turnaround, we worked together with Public Auditor staff to take "snapshots" of the conditions affecting health care delivery in the insular areas. Our goal was to combine personal observations and interviews to produce a report that offers a flavor of the difficulties and challenges existing in the insular areas in a format that affords easy reading.

In an attempt to foster candor with those we spoke to, we made a commitment at the project's commencement that the identities of those interviewed would not be revealed. Our intention has not been to embarrass or criticize the good work of insular area health care providers and administrators. Rather, we wanted to develop objective observations and identify trends that would enable the Secretary and insular area officials to focus strategically on solutions to the unrivaled challenges this unique population experiences in the delivery of health care.

The trends are manifest and create significant hurdles to providing quality patient care. The most notable commonality among the seven locations lies in their unique and sometimes treacherous geographic locations. Extreme remoteness coupled with the unforgiving elements of nature are undying problems for hospitals and clinics in the insular areas. Typhoons and tropical storms have shown their strength and left health care facilities damaged in the past and staff nervous for the future.

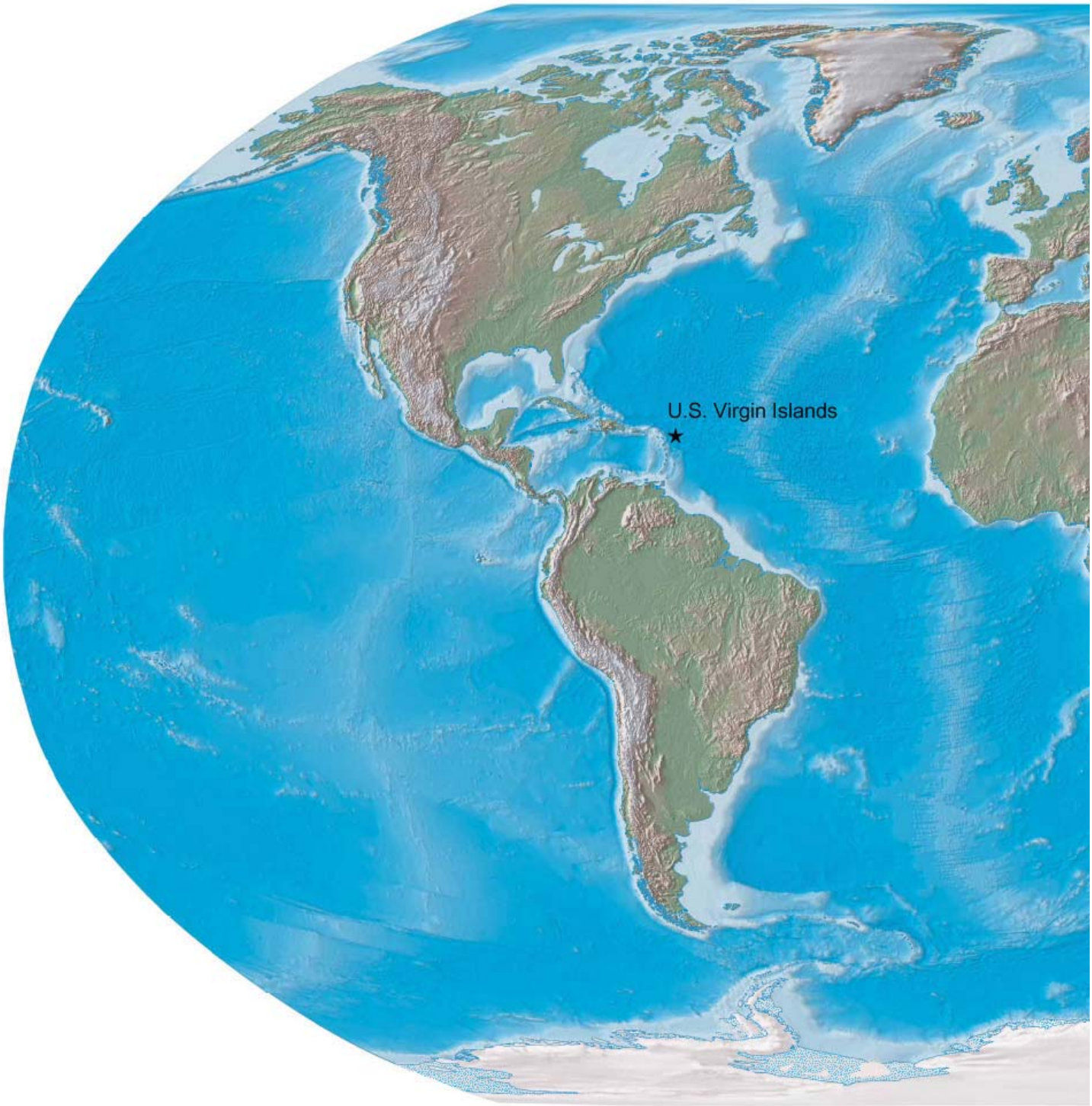
Hospitals also struggle to recruit and retain nurses, physicians, and specialty practitioners. Salaries incomparable to those in the United States mainland fail to attract personnel. Sizable nursing vacancies stretch the workdays and eliminate vacation time for nursing staff. Specialty physicians, who sometimes serve as the only one of their kind for an island's entire population, are on call 24 hours a day, 7 days a week, year round. Most often, overtime pay and compensatory leave are not an option.

Quite often it is the hospitals' lack of specialty practitioners such as cardiologists, oncologists, and trauma care personnel that sends patients searching for a way to get off island. Some facilities continuously struggle to cover the monumental costs of air transport and off-island medical services; others are forced to leave this expense to their patients. Unfortunately, insular area patients often cannot afford the multi-thousand dollar trips off island, or they are in conditions too fragile for safe travel. Many die before they ever find a way out.

For patients who are able to receive treatment on island, medical supplies such as IV pumps, incubator lights, bedside commodes, and even gloves are available in limited quantities. Hospital nurses and physicians are left sharing supplies between patients or even purchasing them with their own money. Medical equipment is antiquated and unreliable and, again, comes in limited numbers, leaving nurses with no choice but to "double up" on newborns in incubators.

The fundamental infrastructure of insular area hospitals is also old and unreliable. Island-wide power failures leave health care facilities relying on overworked and faulty back-up generators – or even worse – in the dark. Electrical issues also interrupt one hospital's water supply; resultantly, this facility has no running water for as many as 8 to 9 hours a day. Critical operational equipment such as incinerators are inadequate or nonexistent and thousands of bags of biohazardous waste litter another hospital's grounds. In other instances, biohazardous waste is burned in open bins at dump sites where children rummage.

No simple solutions lend themselves to correct these startling trends. We hope, however, that this report will provide the basis for meaningful discussion and development of long-term solutions that will help improve the state of health care facilities and the delivery of health services in the insular areas.


U.S. Virgin Islands


CNMI
Guam
FSM
Palau
Marshall Islands
American Samoa

Guam

Around 4 a.m., a nurse at the Guam Memorial Hospital boarded an ambulance bound for the A. B. Won Pat International Airport. She had just finished working the night shift, during which a woman in her late 20s had come to the emergency room, complaining of a severe headache, and then passed out. Physicians determined she was bleeding in her brain, but no neurosurgeon was on hand to treat her.

After arriving at the airport, the nurse, a respiratory therapist, and the young woman boarded a Continental Airlines jet and prepared for an arduous trip to Hawaii to see a neurosurgeon. The ventilator had to be left behind because it had not been approved by Federal Aviation Administration. The nurse sat toward the back of the plane, where several rows of chairs were laid flat for the stretcher, and pressed on a plastic bubble full of air connected to her patient's mouth. She counted, "One, two," then pressed again. She and the respiratory therapist would alternate doing this for 7 hours, knowing that the woman's life depended on the precision of their movements. After landing in Hawaii and turning the patient over to emergency personnel, the nurse flew back to Guam the next night and reported to work the following day. Her patient did not survive.

This nurse is one of 304 nurses at the Guam Memorial Hospital Authority (GMHA) who are often required to accompany patients off island for serious treatments – some needing neurosurgery, hip replacements, open heart surgery, or cancer care – due to GMHA's severe shortage of physician specialists. Four to six GMHA patients each month are referred to hospitals in Hawaii, California, and the Philippines. Due to the lengthy lapse in time before patients can receive specialized care, some patients in critical condition do not make it back alive, and the nurses who accompany them are often left exhausted, yet forced to resume their duties upon return.

The GMHA parking lot is at maximum capacity by 10 a.m.

Guam, which has a population of 173,456 people, only has one public hospital, which is severely understaffed and underfunded. This causes a litany of problems including a high staff turnover rate and the inability to recruit physicians and nurses, leaving local citizens with few options for specialized care. GMHA staff noted that 80 percent of their patient population is also uninsured or receives medical assistance from the Department of Public Health.

The hospital structure itself is also in extreme need of attention. Due to the small size of the building and lack of space, the facility is so overcrowded that patients

are lining up waiting for beds. GMHA physicians noted that emergency-room patients are sometimes placed in the pediatric and maternity wards due to the shortage of beds – most of which are placed barely 3 feet apart with little room for visitors. By 10 a.m., the parking lot is so packed with vehicles, patients and visitors have to leave their cars on neighborhood side streets.

GMHA officials anticipate that with the Civilian Military Buildup, Guam will experience a population spike by 2014 of approximately 40,000 more people. In addition to this spike, officials anticipate Guam's normal population to grow at a rate of approximately 3,000 people per year. To remain consistent with the U.S. national average of 2.8 acute care hospital beds per 1,000 persons, GMHA officials stated that they would essentially need to expand the hospital's acute care bed capacity from 172 to 250 beds within the next 5 to 7 years.

There are currently two community health centers (or clinics) located on Guam that provide medical services to individuals, again regardless of their ability to pay. While both the clinics and the hospital share physicians and nurses, GMHA consistently refers all hospitalized patients to the clinics for follow-up care. The clinics, like GMHA, are short staffed, low on supplies, and tight on space.

"The clinics are overflowing and patients are waiting all day to be seen," a public health official said.

The clinics receive more than 30 "walk-in" appointments a day, and in order to accommodate the increasing demand, they have extended normal clinic hours of operation until 7 p.m., according to public health officials.

GMHA management stated that the hospital and clinics are "mandated to provide acute care services to all patients presenting at its doors" regardless of their ability to cover the cost of care. According to GMHA officials, GMHA's requirement to provide care to a population that is largely uninsured leaves the medical facility, and private insurers, accountable for $30 million a year in health care costs. For those patients who have no form of payment or insurance, GMHA absorbs the expense.

"This makes it very difficult to sustain operations and make capital improvements," a hospital official said.

GMHA physicians noted that legally, Guam can only employ U.S.-licensed physicians, which means its main source of employees reside 6,000 miles away. They also stated that physician salaries in Guam are much lower than those of physicians in the United States.

Due to Guam's extreme remoteness, relocating to the area can also be expensive, and GMHA staff noted that the hospital currently only covers airfare for new hires, not including family, and 2,500lbs of their personal belongings. The physicians are responsible for all other costs associated with their move.

GMHA officials explained that consequently, recruiting medical staff to Guam has been challenging, and physicians who do venture to the island typically do not stay long due to low salaries and the long hours of work associated with inadequate staffing levels. These conditions breed a cycle of high turnover, greatly disrupting the continuity of care for patients.

> "You can add 10 more beds, you can add 100 more beds, but we just don't have enough staff for it….You can only overwork your staff so much."

GMHA explained that while nurses are scheduled to work a defined 8-hour shift, they sometimes work up to 12 hours in one day. The nurses said they often give up time off, including vacations, and stated that while the nursing director normally functions in a supervisory role, at GMHA she works as a floor nurse as well to accommodate the shortage of staff.

"You can add 10 more beds, you can add 100 more beds, but we just don't have enough staff for it….You can only overwork your staff so much," one hospital staff member said.

A GMHA physician commented on the ramifications of having one radiologist to service Guam's entire population. "He comes in at 9 o'clock in the morning and he doesn't leave until midnight. He doesn't get paid for all those hours." The physician noted that having so few specialists often means the ones they do have are unable to take vacations and are constantly on call. "This hospital runs in spite of itself," he said.

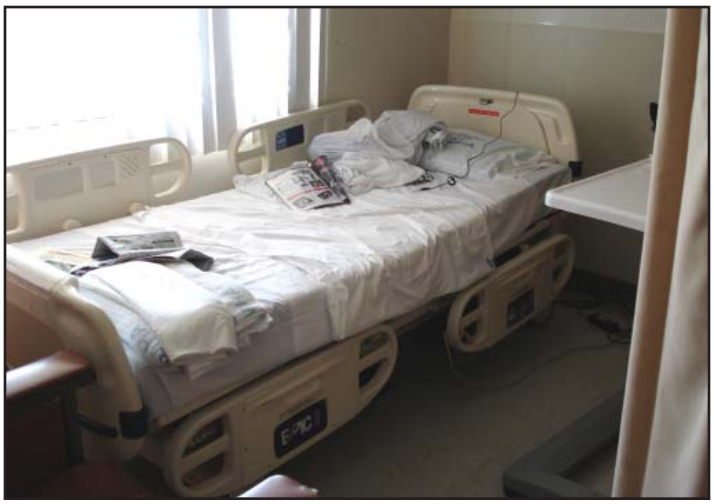
Most notably, GMHA struggles with its ability to attract and maintain specialty physicians such as oncologists, orthopedic surgeons, and cardiologists. This becomes problematic when emergency specialty care is needed. GMHA staff recalled a situation in which a physician had to conduct a procedure he had never performed before in order to stabilize a patient so the individual could be sent off island for further care.

Referring patients off island is another symptom of having few available specialists. Patients with seri-

ous medical conditions are often forced to travel anywhere from 3 to more than 18 hours by plane, many times with nurses in tow.

The majority of costs associated with off-island referrals, including airfare, meals, medical procedures, lodging, and ground transportation, are the responsibility of the patient. GMHA explained that the majority of patients, even with insurance, are unable to cover the costs of off-island referrals. In the event that a patient cannot afford to cover these costs, they simply are unable to receive off-island care.

Extremely small patient rooms are not family friendly, leaving little to no space for visiting family or friends.



There are additional factors that can inhibit patients' abilities to access off-island specialty care. GMHA staff stated that the process of administratively referring and physically relocating a patient off island to receive care can at times take months. Patients seeking off-island care must also be in a stable enough condition to fly. GMHA reported an instance where a patient requiring neurosurgery after experiencing head trauma was unable to fly off island due to his condition and therefore died.

"A lot of people are dying because they can't get health care when they need it," a GMHA official said.

GMHA nurses noted that Continental Airlines is the only airline servicing this population, and it requires that patients recently suffering from heart complications must wait 10 days before boarding an off-island flight. Naturally, waiting to receive care can potentially compound a patient's medical problems, or in some instances lead to death.

As staff noted that GMHA is unable to cover the costs of sending its patients off island for treatment, it is equally unable to cover the cost of caring for patients travelling from the Freely Associated States to Guam. GMHA staff stated that the Compact of Free Association requires that GMHA provide health care services to the citizens of the Federated States of Micronesia, and in return, Guam receives several million dollars in annual Compact Impact Grant Funding.

Hospital officials noted that the amount of funding it is provided to treat this population "does not sufficiently recuperate the costs incurred." GMHA nurses noted that they even struggle with what they call "fly-by births," adding that many times expectant mothers residing in the Federated States of Micronesia will travel to Guam simply to deliver their children on U.S. soil to ensure their child can have U.S. citizenship as well as be eligible for other public assistance services. GMHA staff stated that these are often high-risk pregnancies due to the fact that the mothers have received little to no prenatal care and come to GMHA with no available medical history or records.

While GMHA continues to struggle with issues related to personnel shortages and high turnover rates, it also faces the problem that the hospital physically cannot accommodate new technology or specialty services. The infrastructure of GMHA has already been pushed far beyond its appropriate capacity, and there is literally no unutilized space left.

GMHA staff stated that they suffer from a lack of storage space for medical records, which requires personnel to keep the inventory of older patient records off site. "It can take more than a week to pull a record," one hospital staff member said of the remote storage containers used to house the documents.

Hospital staff also explained that these storage areas are notoriously susceptible to the elements of the weather, and documents have often been damaged by water leakage.

The hospital rooms themselves are extremely small and not family friendly. Most of the patients' rooms contain two beds, which are barely 3 feet apart, separated only by a thin curtain. The only space available to family members who come to visit is a small recliner chair pushed up against the end of the bed. It would be nearly impossible to accommodate more than one family member, a nurse, and the patient in the room at the same time.

"We have stretchers next to the sink because there's not enough room," an emergency room staff member, who is typically responsible for as many as seven patients at one time, said. "It gets really bad."

As stated previously, due to population growth, GMHA anticipates it will need to expand its patient capacity to approximately 80 acute care beds within the next 5 to 7 years. GMHA estimated this expansion would cost $70 million. While an expansion of its bed capacity would necessitate an expansion of the hospital, GMHA would still be tasked with addressing the ever-growing list of problems that plague the current infrastructure of the hospital.

For example, GMHA officials explained that the hospital's ventilation system needs updating. While two of the four floors have new systems, two floors still have ventilation systems that GMHA calls "unhealthy." The areas lacking clean ventilation units include the emergency room, the operating room, and the nursery. GMHA estimated the renovation of the ventilation system to be a $2.5 million project.

GMHA officials also worry that the hospital structure will be unable to withstand another strong typhoon like Pongsona, which hit in December 2002. Hospital staff recalled that during Pongsona, interior walls of the facility collapsed, windows were blown out, patients had to be evacuated from the intensive care unit and pediatrics, and parts of the hospital were without power for 24 hours.

A morgue employee stated that due to the power outage, the GMHA morgue, which has the space to hold eight bodies in two separately refrigerated sections, lost power in one of the sections and actually had to "double up" on bodies in each space.

"By the time the power was up, the bodies were so decomposed, they had to be cremated," a morgue employee said of the bodies that could not fit in the refrigerated space.

While the infrastructure may be antiquated and unreliable, smaller daily tasks occurring within the hospital walls are affected by hospital-wide shortages. GMHA officials noted that they continuously struggle with outstanding balances with the vendors they contract with, often resulting in a delay of receiving supplies and potentially endangering patients. GMHA cited instances where salts and filters used to treat the "extremely high levels of calcium and magnesium" in the hospital's water supply were unavailable due to outstanding balances with its suppliers.

Six donated ambulances service the entire population of Guam.

Not only do outstanding balances affect GMHA's ability to obtain necessary supplies, but GMHA officials claim the overall lack of funding creates hospital-wide shortages of everyday equipment. Officials noted that they consistently have a lack of items such as IV pumps, feeding pumps, stretchers, and personal protection equipment including gloves and masks. Hospital staff explained that supplies are often shared between patients, and nurses are left running from one bed to the next looking for the supplies they need.

"We share simple things like bedside commodes," one hospital staff member said. "We wipe them down so fast to transfer to the next patient; hopefully they are cleaned well enough."

GMHA also noted that emergency transportation to the hospital was difficult due to a "serious lack of resources." There are currently only six functioning ambulances, maintained and controlled by the Guam Fire Department, that service the 19 villages and 336 square miles of Guam. All ambulances have been donated by a variety of organizations.

One GMHA staff member said, "In the event of a mass casualty, we would not be able to transport patients to the hospital in a timely manner."

GMHA officials added that the facility's contingency plan in the event of a mass casualty would involve using school buses to transport patients. •

Commonwealth of the Northern Mariana Islands

SAIPAN

Sunlight beamed through the windows of the small, white and blue, stucco building as beads of sweat trickled down the faces of patients sitting in neat rows of black chairs. They fanned themselves with papers as new patients walked through the clinic door, an unpleasant wave of heat hitting them. A nurse positioned her face inches from a scale as she weighed a small child, squinting to see the numbers in the darkness.

Another nurse with jet-black hair pulled up in a ponytail, matted with sweat, stood next to the reception desk, her face glistening from the heat. "The power has been on and off all morning," she said. "This happens a lot."

Saipan, the largest of the 14 Northern Mariana Islands, loses power, island-wide, multiple times a day due to faulty power plant engines, leaving the Southern Community Health Clinic with no electricity and the Commonwealth Hospital Center (CHC) relying on an overworked back-up generator. When the hospital's back-up generator fails, doctors and nurses scramble to assist patients on ventilators, connecting them to manual breathing equipment where staff have to squeeze air into the patients' lungs. "There have been times when the backup generator did not come on for 10 to 20 minutes," one CHC staff member said.

> "We are at the crossroads of a total breakdown."

Power outages are one of numerous problems that plague CHC and the Southern Community Health Clinic. CHC also suffers from old equipment that poses a serious health risk and liability; poor record-keeping systems, with sheets of medical records drifting from tall, unorganized stacks; few everyday supplies, such as blood for transfusions; and a lack of physician specialists, many of whom are needed to perform life-saving procedures at a moment's notice.

"The place we are at is scary and there is an incredible pressure to keep cutting back on things," a CHC physician noted. "We are at the crossroads of a total breakdown."

The power situation in Saipan affects CHC and the Southern Community Health Clinic on a daily basis. Clinic staff operate without power as if it comes naturally, barely flinching as the lights go out several times a day. The clinic has already lost two generators, after they were stolen by vandals. When the power goes out for more than 3 hours, nurses pack immunizations in ice so they do not spoil.

CHC's backup generator kicks on two to three times a day as the power goes out. But sometimes there is a delay, and CHC staff worry that using the backup generator so often is prematurely aging the equipment.

CHC staff added that due to a lack of funding, the hospital maintains no spare parts for its generators, which are over 20 years old.

CHC's boiler has also been on the hospital's "to-do" list for the past 7 years. Staff said the boiler is oversized and runs inefficiently, noting that recently a faulty steam valve accidentally ran scalding water through sterilization equipment, melting $11,000 worth of medical scopes.

The medical records filing room at CHC is overflowing with stacks of patient charts that are waiting to be filed.

"We were just grateful that water didn't come out of a patient's shower," a hospital staff member said.

Records management is another severe problem at CHC. One hospital official jokingly said, "What medical records system?" when asked how patients' charts and medical histories were filed.

Currently CHC maintains the majority of its medical records in hard copy format. Staff admitted that overall, files are incomplete and inaccurate. Discharge summaries, while dictated and transcribed at the time of the patient's discharge, do not get filed for up to 1 year, according to CHC staff. This lack of timeliness in filing patient records has created a medical records room that is overcrowded, unorganized, and, physically, a mess.

Medical records pile up on tables, desks, floors, and even windowsills waiting to be filed; charts become so full and unorganized that pages are torn and lost.

"It is disheartening when we have to tell a patient we can't find their record," one physician said.

CHC's problems with records management have affected billing as well. Staff stated that they are unable to appropriately bill patients in a timely manner due to the lack of an effective patient chart-filing system. While CHC would like to install an electronic system that would allow immediate billing, it lacks the funding and personnel to maintain it.

Staff said they also struggle with receiving supplies

in a timely manner due to the hospital's outstanding balances with vendors, discussing a recent incident where the hospital completely ran out of the strips used to test patients' blood sugar.

"We never pay on time; sometimes we don't pay," one hospital staff member said.

CHC staff even recalled several instances where they had to overnight blood from Guam because the hospital ran out.

"We shouldn't have to go begging for blood," a CHC staff member said.

CHC noted that because of its poor reputation for non-payment, it often had no choice in which vendors it used.

"We have to use the ones that will accept the fact that they won't get paid for 6 to 7 months," one physician said.

CHC also has a serious lack of small-scale medical equipment and supplies. A hospital staff member noted that CHC "often run[s] out of appropriate sized needles," adding that the hospital did not have any renal biopsy or spinal needles. CHC also frequently runs out of lab reagents for basic laboratory procedures. Staff expressed dismay with the supply dilemmas they confront when treating patients.

"The physicians are the face of health care here," one physician said. "The families think the doctors are inadequate, all because of our lack of resources. This has a tremendous effect on patient care and physician morale."

Obtaining physician specialists is another obstacle for CHC in ensuring patients with more serious conditions are treated. While CHC has been able to maintain enough physicians to tend to acute cases, they continually struggle with retaining and recruiting specialists. The specialty providers whom they do successfully recruit to the area typically leave within a 2-year time period due to salary and benefits packages in Saipan that are not as competitive as those available in the United States.

According to CHC staff, the local medical licensure board requires that all physicians at CHC be licensed in the United States or Canada, which means they may not recruit physicians from much closer locations like New Zealand, Australia, or the Philippines.

Because it is so difficult for CHC to recruit specialty physicians, patients requiring specialty care must be referred to off-island providers. Those who need immediate attention are often unable to receive it, sometimes resulting in death. CHC staff noted a particular instance when the lack of a cardiologist resulted in the death of a patient who was too sick to travel and needed a cardiac valve transplant. Staff also recalled an instance where a patient with neurological abnormalities died while waiting to be referred off island for an MRI.

CHC maintains a six-person committee composed of physicians and clinical psychologists who determine whether an off-island referral is warranted and, if so, where the patient will be sent. For the past several years, the medical referral program's annual budget has been $3.7 million. The patients or their insurers are responsible for the cost of the medical procedure, and if they are unable to cover the cost, they are given the opportunity to sign a promissory note to prevent delay of receiving care.

CHC employees say the current hemodialysis unit resembles a "morgue."

Depending on the patients' needs, CHC generally refers patients to Guam, the Philippines, or Hawaii. Once approved, the referral program will cover a patient's airfare, hotel accommodations, per diem, and the costs for an accompanying hospital escort.

CHC staff stated that while some patients genuinely needed the off-island care, some viewed the medical referral program as a "ticket to a free vacation." Staff added that there was "no accountability" for the per diem money given to patients sent off island, and staff recalled instances where it was spent on items such as leaf blowers and alcohol.

One CHC physician said the medical referral program had become a political platform for public health officials. "The legislature will not let us cut out benefits like this because it is a political commodity," he said.

One specialty service that CHC has been able to provide for its patients is hemodialysis, in part due to

the high incidence of diabetes in Saipan and the end-stage renal disease and kidney failure that often develops as a complication of the disease. In 2001, under an original construction contract of $5.6 million in U.S. federal funds, CHC began construction of what was originally intended to be a new hemodialysis unit that would better accommodate its growing demand for hemodialysis services. By June of 2007, the project's magnitude and scope brought its total budget to $17.6 million, deeming this project as CNMI's largest capital improvement project. The project evolved to include a two-floor extension of the existing facility that would contain a hemodialysis center on the upper level and executive and administrative offices, a bio-terrorism center, and a 10,000-square-foot medical warehouse on the lower level. This state-of-the-art hemodialysis unit is pristine, with private curtained areas for treatment, plenty of room for visitors and family members, and private consultation rooms.

While the new administrative and executive offices are currently being utilized, the 10,000 square foot medical warehouse is completely empty, and the new hemodialysis unit upstairs has yet to service one patient. The new facility, a stark contrast to CHC's currently functioning hemodialysis unit – a tiny, one-room space that hospital employees said resembles a "morgue" – has been vacant since its completion. CHC staff said the new unit still needs to be certified by Medicare, and they hope to move into the facility "soon."

"We scowl at that hemo unit," one physician said. "It's a sign of a failed health care system."

According to Hawaii State Survey Agency officials, who act on behalf of Medicare regarding certification issues, during a June 2008 tour of the new dialysis facility, problems with the physical layout and design of the unit prevented CHC from receiving approval to move into the new facility. A survey official said, "A tour of the new water treatment system [for the dialysis unit] found significant areas which need to be corrected before the move to the new unit can be authorized." The official added, "Water treatment affects all hemodialysis patients," and noted that CHC's current system contained several issues that presented "the potential for harm." Survey officials also noted several structural issues that would prevent clear visibility of patients by nursing staff, another issue that needs correction before CHC can use the new unit. An additional survey of the facility was scheduled for July 2008; however, a survey official said, "The survey was not done as it was determined that the new facility was not ready for survey." •

CHC's state-of-the-art hemodialysis unit (top) has yet to service one patient, and its new 10,000-square-foot storage warehouse remains empty. CHC currently uses rusting metal storage containers (below) to store items such as patient records and medical supplies.

Federated States of Micronesia

POHNPEI

A rusty, pock-marked, blue pick-up truck sat at the dump site, surrounded by mounds of trash. A young man wearing a blue baseball cap, a bright red T-shirt, and dusty blue jeans faded at the knee worked rigorously in the bed of the truck. Wearing only a pair of thin, white latex gloves, he tossed piles of biohazardous waste produced from the Pohnpei State Hospital into a Dumpster. A cloud of heavy smoke settled over the site from the smoldering waste. The ground was strewn with used syringes, vials of liquid, ashen specimen jars, grimy pill bottles, and dust-covered plastic tubes. Used latex gloves and a cotton swab soaked in yellow peeked out of a grey trash can in the truck.

Pohnpei State Hospital has no safe method to burn its biohazardous waste. Without an incinerator, government contractors are left with the perilous task of personally disposing of hospital waste, putting their health at risk on a daily basis.

Biohazardous waste disposal is just one of many troubles Pohnpei State Hospital is facing. The hospital has limited medical supplies and equipment, sometimes having to squeeze two infants in one incubator; a deteriorating facility with cracks and a shifting foundation; and an overall lack of specialty physicians. Some of these problems have contributed to patient deaths, according to staff.

Pohnpei State Hospital services the island of Pohnpei, one of four states in the Federated States of Micronesia. Twenty-five smaller coral atolls, or rings of coral islands, lying outside the barrier reef also encompass the State of Pohnpei. The hospital offers assistance to a population of 34,000 people, including the main island and atolls.

Disposal of biohazardous waste is one of Pohnpei State Hospital's major impediments to providing a safe environment for patients, staff, and the public. The heat

The air at the dump site is filled with smoke as two men work to burn the biohazardous waste from Pohnpei State Hospital.

generated from the fires burning in open bins at the local dump site is not actually hot enough to thoroughly burn all of the biohazardous waste, exposing Pohnpei citizens and waste management staff to a toxic environment. Piles of charred metal cans and half-burned debris littered the dump site's burn area.

Hospital staff claim they will soon be receiving an incinerator from the Japanese International Cooperation Agency, an independent government agency in Japan that assists developing countries with economic and social growth. A senior staff member at Pohnpei State Hospital said the incinerator will be located on site at the hospital to give staff control of disposing waste.

A young man only wearing a thin pair of latex gloves unloads biohazardous waste from Pohnpei State Hospital into a Dumpster to be burned (top). Used gloves, cotton swabs, and other medical waste fill a trash can that sits in the bed of the pickup truck waiting to be unloaded (below).

Hospital staff expressed concern about biohazardous waste disposal within the facility as well. They said they sometimes have no alternative but to use plastic bottles and standard black trash bags to dispose of waste because they run out of the red biohazardous waste bags and the special containers for needles and syringes.

Pohnpei State Hospital is also in dire need of supplies and medical equipment. Staff said they do not have a CT scanner or an MRI, and they need a new transformer for one of their two X-Ray machines. The hospital only has two dialysis machines, and during the OIG's visit, one was not working, leaving patients needing care in a dangerous position, relying on only one dialysis machine. The service provider for the dialysis machines resides in Guam, and commercial flights from Pohnpei to Guam are not available on a daily basis.

The needs list for the obstetrics ward is extensive: thermometers, pediatric blood pressure cuffs, neonatal blood pressure cuffs, neonatal and pediatric monitors, pediatric masks, a ventilator, an otoscope, and pediatric colostomy bags.

With only two, 30-year-old incubators, hospital staff said they often have to "double up" infants in the tiny spaces. When this occurs, staff said the babies sometimes pull each other's feeding tubes out.

With cramped quarters and outdated equipment, the hospital's Physical Therapy unit also reported a need for supplies. Staff, which include one physical therapist, one technician, and an aide, said they need additional basic equipment such as an ultrasound machine, crutches, canes, walkers, a treadmill, therabands, a pulley system, parallel bars, and a grip master for hand exercises, just to name a few.

The condition of the actual facility itself is another major concern. The 30-year-old building has experienced structural cracks along its support beams, and staff reported that the hospital's foundation has weakened and shifted and the concrete roofing has multiple

The hospital's ambulances are primitive and contain no emergency response equipment or oxygen. Only a simple gurney is found in the back of this ambulance.

irreparable leaks. The flat roof has been covered with an aluminum roof, which has slowed the leaks, but the cracking continues. A senior staff member stated that he was gravely concerned about the integrity of the current facility.

The hospital is also in need of updating its electrical equipment and plumbing. The electrical panel has reached about 80 percent of its capacity, according to staff.

Contributing to the overall lack of funds at the hospital is the high cost of long-distance telephone calls. According to staff, Pohnpei State Hospital spends around $100,000 per year on long-distance calls – including calls for telemedicine, where staff consult with the Tripler Medical Center in Honolulu, HI, for advice on diagnoses. The hospital rents a telephone line that is available 24 hours a day, seven days a week. Calls cost $1.50 to $2 a minute to the United States and $2 to $3 to other foreign countries.

Employee retention is another challenge Pohnpei State Hospital is facing. With only 30 physicians, including 10 specialists, and 60 nurses available to treat a population of 34,000 people, staff are often left overworked and underpaid. Staff said the salaries in Pohnpei are far less than those offered in neighboring islands such as Palau or the Marshall Islands.

Staff said patients needing specialty care who cannot receive it on island go before the off-island referral committee for approval. Of the 4,500 applicants for off-island treatment per year, only approximately 300 are approved due to limited funding. The off-island referral process can take anywhere from 48 hours to one week for emergency cases and up to months for elective cases. Hospital staff said there have been cases in which patients have died while waiting for off-island approval.

Patients receiving off-island referrals are sent primarily to the Philippines, which is an 8- to 10-hour flight. Commercial airline policies require that patients' cases are reviewed and approved by the airline before the patient can be transported, according to hospital staff. Continental Airlines, the local service provider, has a dedicated person who reviews the case to determine if the airline will allow the patient to travel, staff said. The patient must be in a stable condition and cannot be contagious.

Off-island referrals are costly, as they include transportation, accommodations, and the cost of medical care. The Pohnpei constitution states that the Government of Pohnpei shall provide health care services for the public. If a patient has insurance, the expenses are partially absorbed by the provider, and the government pays the rest. The hospital has an allocation of $300,000 per year for off-island referrals, which hospital staff stated is usually completely absorbed by the second quarter. At that point, the hospital requests additional funds, which are typically approved by the Pohnpei legislature. This year the hospital estimates that the overall cost of off-island referrals will reach $500,000.

Pohnpei State Hospital currently has three working ambulances, but they only service the main island and are outdated, according to staff. They do not contain emergency response equipment or oxygen. One of the vehicles contains only a gurney in the back with nothing to hold it in place. Hospital staff explained that ambulance drivers in Pohnpei are just "taxi drivers" and they do not have any emergency medical training. Staff noted that the salaries for the ambulance drivers are very low and the only qualification needed to hold the position is the ability to drive. Hospital staff said there is "no doubt" people have died as a result of not having access to ambulances and trained EMTs. •

CHUUK

A plastic water bottle overflowing with used needles sat on a table near the side of the Chuuk State Hospital building. A yellow box marked "biohazard," filled with syringes and needles, sat next to the bottle. Two salmon-colored, plastic bags full of waste from the morgue rested against the building, their contents cooking in the sun. They had been sitting outside since the day before.

The inept disposal of biohazardous waste is one of many problems that inhibits the Chuuk State Hospital from providing a safe environment for patients and staff. The hospital also suffers from a lack of clean water used to bathe patients and wash medical supplies; little to no standard medical equipment, including incubators, portable X-Ray machines, ventilators, and wheel chairs; and a minute staff with few resources to perform medical procedures.

The hospital's only incinerator sits among grass and weeds (left). A plastic bottle full of used needles sits on a table outside of the hospital waiting for disposal (right).

Chuuk is also one of the four states in the Federated States of Micronesia, and includes six major island groups. Chuuk State Hospital, built in 1973 and located on the main island of Weno, is the only hospital to service all of the islands of Chuuk, a population of over 53,000 people.

Disposing of waste is one of the hospital's most serious challenges. Maintenance staff claimed that the facility's biohazardous waste had been burned in the incinerator 72 hours before the OIG's visit; however, the typical mound of trash that would normally accumulate over that span of time was nowhere to be found in the designated area for dumping the waste. One staff member said the hospital's biohazardous waste was taken to a local dump site where children often rummage through garbage.

The incinerator, which looked like nothing more than a large, wood-burning stove, was located behind the hospital and showed no signs of having been used. The grass and plant life located near the structure that would normally die due to the high temperatures was thriving. Green weeds sprouted up knee-high from the base of the incinerator, which sat directly on the ground. Environmental Protection Agency standards state that

Morgue employees embalm bodies on a metal gurney that lacks the drainage and suction functions of a typical embalming table (left). Pohnpei State Hospital's embalming table is far more advanced (right).

incinerators should sit on a cement pad.

A facility maintenance employee said the incinerator, which stands about 7 feet tall and 2 feet wide, is too small to handle all of the facility's waste, does not have the capacity to produce enough heat to effectively burn waste, and lacks an air filter.

Within the hospital, needles and other biohazardous items, including human specimen cultures, tissues, and waste, are deposited in designated containers. However, maintenance staff claimed that they had never received formal training on how to handle and dispose of biohazardous waste and that the hospital had no written policies or procedures for staff to follow.

Another major concern of hospital staff is their lack of a consistent and clean water source. Chuuk suffers from chronic power outages resulting from electrical system deficiencies, and as a result, electricity is not available to pump water into the hospital 24 hours a day. The hospital experiences periods of time without running water lasting 8 to 9 hours, and staff are forced to fill large drums to cook, bathe patients, and clean medical equipment. This water is also polluted due to sewage issues on the island. While patient wounds are cleaned with saline, staff have no choice but the use this contaminated water for all other purposes, according to a staff supervisor. Due to the poor water quality, there have been ongoing outbreaks of patients with diarrhea.

Hospital staff considered the overall upkeep, maintenance, and cleanliness of the facility and medical equipment to be in very poor condition. They said that when equipment at the hospital breaks, there is often no back-up, and the ability to obtain the parts or expertise to repair the equipment does not exist due to a lack of funding or availability of spare parts.

Dust has gathered on the broken incubators piled up in the hallway outside of the laundry room. With only four working incubators, nurses sometimes have to place two infants in the small, covered structures needed to keep them warm, according to a hospital nurse.

The only dental X-Ray machine at the hospital is broken, which prevents dentists from performing the comprehensive oral examinations used to detect needed root canals and tooth extractions. No other dental facility exists on the island, so Chuuk citizens are left with few options for dental care.

There is only one functioning autoclave at the hospital, used to sterilize medical equipment; however, staff said it had been "acting up" lately.

The hospital's morgue staff also battle having to use broken, inadequate equipment for performing their duties. Morgue employees embalm cadavers on a simple metal gurney that lacks the standard drainage and suction functions of a normal table used for this process. Employees have little control over the drainage of flu-

Cadaver refrigeration space sometimes runs out and bodies have to be left outside in the heat. The morgue space appeared dirty and unkempt.

The kitchen floor is littered with fruits, pots, and portable gas burners staff use to prepare food.

Broken incubators sit in a hospital hallway. Currently, the hospital only has four functioning incubators.

ids from bodies during the embalming process, and the room used for the procedure appeared dirty and unkempt.

There are also times when morgue staff do not have enough refrigeration space and have no alternative but to leave cadavers in body bags outside of the building. As a result of being left outside in the heat, bodies decompose quickly and the potential for the spread of infection escalates, both to hospital staff and the community.

Morgue staff also lack the necessary training to safely perform embalming, a procedure that has the potential to spread infectious diseases to the living. While the senior morgue staff originally received training, they have received no follow-up training in the last decade, and junior staff have received no formal training whatsoever.

A morgue employee provided a hand-written wish list that included basic supplies he felt the morgue desperately needed. The list began with the request for an embalming table with drainage and aspirator functions and included simple items such as body bags, gowns, masks, gloves, trash bags, and a suturing needle. The note also stated, “Lastly, please provide me training for morgue, for certification. Thank you very much.”

Inadequate and broken equipment at the hospital has also affected support services staff. Kitchen staff noted that neither the pressure cooker nor the dishwasher in the kitchen have worked for years. Staff have to cook for over 100 physicians and nurses, as well as a 150-patient capacity hospital, with few supplies. Because the stove is too small to accommodate industrial-size pots, staff have to use portable gas burners that sit on the kitchen floor to prepare food, according to hospital kitchen staff. Housekeeping staff also use standard washing machines and only have one standard clothes dryer to process all of the hospital’s dirty laundry. There is also a shortage of basic supplies such as mops and brooms, which staff stated makes cleaning and sanitizing difficult.

The hospital has only one operational ambulance.

Hospital staff are also in desperate need of many everyday medical supplies, including baby cribs, wheel chairs, crash carts, digital and glass thermometers, and newborn blood pressure cuffs. The hospital only has one ventilator, two defibrillators, and one cardiac monitor. The hospital also has no portable X-Ray machine, specialized heart stethoscopes, or treadmills (for stress tests).

Emergency Medical Services are also non-existent for the people of Chuuk, due to limited supplies and resources. Chuuk State Hospital has only one operational ambulance on the main island of Weno used to transport people to the hospital. Staff admitted that because the island only has one ambulance, more deaths occur because patients cannot receive care in time. In addition, staff noted that the ambulance is not equipped

with any medical support equipment and the drivers have no medical training. A hospital staff member said those who are able to drive themselves or family members to the hospital are often delayed by the island's roads, which are in disrepair. Roads riddled with giant, water-filled potholes, sometimes the width of an entire car, and sunken portions of roads, create driving hazards and can slow traffic to a crawl.

Emergency air transport to the outer islands and atolls is currently unavailable, so individuals who live in those areas must travel to the hospital by boat from as far away as 160 miles, according to hospital staff. A hospital physician noted that it can sometimes take patients a week to reach the hospital by boat. While there are dispensaries (small clinics) on the islands, they are generally only equipped to provide basic care.

During Tropical Storm Chata'an, which devastated Chuuk in 2002 and left 47 people dead and dozens more injured, hospital staff depended on the efforts of non-governmental organizations, military volunteers, and religious organizations to help transport victims who lived on the outlying atolls and islands to the hospital on Weno.

Records management is another major problem for Chuuk State Hospital. Patient charts contain critical information related to an individual's medical history, and records management plays a critical role in the diagnosis and treatment process. At the hospital, physicians and nurses reported problems with missing and duplicate files, causing diagnoses and prescriptions to be made without knowing existing conditions and medications.

A hospital administrator explained that the records management unit is overwhelmed with patient charts and re-filing demands. The office itself was jammed with wall-to wall-shelves bursting with patient charts. Backlogs of information in need of filing remain stacked throughout the area.

As with many of the hospitals in the Pacific Islands, Chuuk State Hospital also has a great need for additional medical staff, including physicians and registered nurses. The hospital's dental clinic only has five dentists that service the entire island. The hospital also has no pediatrician, urologist, orthopedist, physical therapist, or ophthalmologist for a population of over 53,000 people. Staff members noted that recruiting specialized physicians is difficult due to low pay and poor working conditions. They also said retention is an issue due to low hospital morale – the overall lack of medical staff has created an already overtaxed staff. This lack of physicians and specialists dramatically increases the need for patients to be referred off island.

The records management unit struggles with re-filing demands and missing patient charts.

Hospital staff explained that in order to receive off-island care, a patient must first be approved by a five-member physician approval committee. Once approved, Compact Health Sector Grant funds cover the air transportation, accommodations, and procedure costs for uninsured patients. For insured patients, Compact Health Sector Grant funds cover only a portion of the costs while the patient's insurance is responsible for the rest. According to hospital staff, the hospital's off-island referral budget is $300,000 a year. After the money runs out, the hospital no longer pays to refer patients off island, and covering the expenses becomes the responsibility of the patient, which is generally impossible for the impoverished community, according to the head of the off-island referral committee.

Hospital staff explained that if a patient is actually granted an off-island referral, the process is quite complicated due to strict Federal Aviation Administration and commercial airline regulations. These regulations require that a passenger is stable and not contagious before being transported. Hospital staff noted that the approval process from the airline alone can take up to 72 hours, and they admitted that patients have died while waiting to be transferred off-island. •

American Samoa

A spread of deep green, freshly trimmed grass stretched across the courtyard of the Lyndon Baines Johnson (LBJ) Tropical Medical Center on Tutuila, the largest island in the American Samoa. Tan-colored awnings provided visitors and patients shade from the sun as the U.S. and American Samoan flags flapped in the wind. While the outside of LBJ's facility was clean and well maintained, the inside told a difference story.

With a lack of specialists, including a vascular surgeon to treat patients with illnesses resulting from diabetes, which according to a 2004 World Health Organization survey affects 52.3% of men and 42.4% of women living in the American Samoa, and the need for critical equipment such as a CT scanner, physicians are left making guesses about patient diagnoses.

Located in the South Pacific, American Samoa is composed of five volcanic islands and two coral atolls – or rings of coral islands. LBJ serves the entire population of the American Samoa, around 58,000 people.

One of LBJ's most serious problems is recruiting and retaining trained physicians and specialists – and overworking the ones it does have.

"LBJ finds it difficult to source and keep qualified staff," one senior staff member said. "Long working hours and high stress contribute to staff illness."

Highest on the list of needs for the hospital, according to staff, are better salaries for hospital employees, which would help with recruiting and retaining staff. According to senior staff members, physicians at LBJ do not even receive benefits such as health insurance, a pension plan, or life insurance.

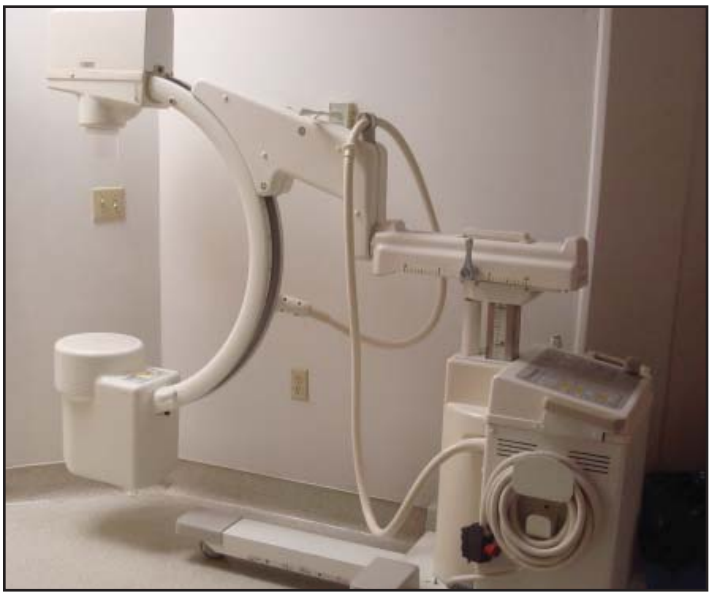
Hospital staff said obtaining skilled medical personnel is also a problem. Of the 36 physicians who work at LBJ, six are U.S. medical doctors, six are practitioners licensed under "territory law," and 24 are practitioners working under a "license issued without completing the requirements for licensure," a senior staff member said. "I'm not sure what definition you put on the word 'doctor,'" the staff member added.

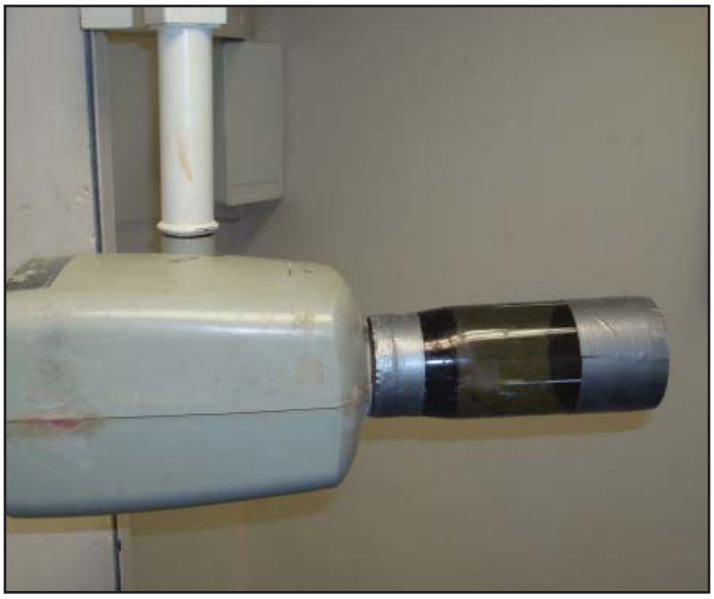
According to staff members, the hospital continually battles issues concerning physician licensing. A senior staff member said the American Samoa Government has sent Samoan medical students to the Fiji School of Medicine, but many have not been able to perform well and often return to the American Samoa without completing an internship or residency. They receive their licenses anyway.

"The American Samoa Health Services Regulatory board handed out licenses to medical officers without them completing the requirements for licensure," the senior staff member said.

LBJ's difficulty in obtaining specialists has also affected patient care. Staff said patients coming to the hospital suffering from head injuries and heart attacks have died because specialists were not on island to treat them.

LBJ has three specialists who work for the hospital on a "revolving contract," according to hospital staff – two nephrologists, who work with patients suffering from kidney disease, and a cardiologist. These special-





A lack of funds contributes to the hospital's inability to fix broken equipment like its C-Arm (left) or its dental X-Ray (right) which staff temporarily have mended with duct tape.

ists visit the hospital for one week each quarter. A senior staff member said the hospital has a great need for a vascular surgeon due to the high number of dialysis patients in American Samoa.

Many American Samoan citizens are sent off-island for care to receive specialized treatment. A senior staff member said physicians bring their patients' cases before the hospital's referral committee "who determine if the need is real and if the patient can be helped." Patient cases are prioritized by the level of severity, and patient names are withheld to protect the committee from "undue pressure," the staff member said. Due to the high cost of referring patients off island, the hospital can only afford to pay for "life threatening cases," according to the staff member.

Referral costs are dependent on the illness and the severity, and they become the responsibility of LBJ if the patient does not have insurance. According to a senior staff member, last year, the hospital spent $2.4 million sending patients off island and was reprimanded for exceeding its budget. This year, LBJ is required to stop referring patients after $2 million is spent. At that point, LBJ will no longer fund off-island treatment.

> "[Physicians] take more of a guess at a diagnosis than know for certain what is going on."

The cost per patient for off-island care averages $43,000, according to hospital staff. Patients are required to sign a promissory note for any costs above $100,000, and LBJ pays the cost and then bills the patient.

"Often, collection is impossible," the senior staff member said.

In 2007, LBJ referred 137 patients off island for treatment to hospitals in Hawaii, the Philippines, and New Zealand. Patients travel over 5 hours by plane to receive care. A flight to the Philippines can take more than 24 hours. Some patients never make the flight. "Many people referred off island pass away," the senior staff member said. "Many people are not referred soon enough."

Staff said the ideal solution for limiting off-island referrals would be to recruit more specialists and obtain the proper equipment for them to perform more complex procedures. Employing more visiting specialists would also assist in lowering referrals, they said.

Patients are not the only ones seeking help off island. LBJ's physicians have attempted to use "telemedicine" practices to connect with specialized physicians living in other parts of the world for advice and assistance. LBJ's experiences with telemedicine, however, have not been successful. LBJ's current system has a poor screen resolution and "times out," locking up sessions and preventing staff from getting needed diagnosis information. Staff have been told that improvements to upgrade the system would cost around $38,000. Patients are sometimes left depending on the diagnosis of LBJ physicians who do not have expertise in certain areas.

It is not just medical personnel that LBJ struggles to obtain. Another critical need for the hospital is modern equipment. According to staff, budget appropriations

cover little more than personnel and operational costs. Staff must apply for grants to receive more funding for supplies, watch surplus websites for needed equipment, and look for opportunities to obtain used equipment when military hospitals close.

Staff said that in recent years, few funds have been available to purchase large-scale medical equipment. When equipment breaks, funds are not available to replace it and staff and patients must do without the service it provided.

For example, because the radiology ultrasound is broken, patients and radiology staff must go to the obstetrics unit to use its equipment. Staff said this creates long lines of patients needing treatment and longer work hours for the hospital's only radiologist.

Last year, the CT scanner, which assists in pinpointing tumors, bleeding in the brain, and aneurysms, among other illnesses, broke. The replacement cost is $280,000, an amount that exceeds LBJ's total equipment budget.

"We just diagnose without the service," a senior staff member said. Physicians have to "take more of a guess at a diagnosis than know for certain what is going on," the staff member added.

X-Ray staff are exposed to elevated levels of radiation because the walls do not have lead in them. Only a thin door encloses the X-Ray area.

Staff also said there are no funds available to replace the hospital's broken "C-Arm," used by orthopedic surgeons. "This increases the off-island referrals," the senior staff member explained.

In the dental clinic, the X-Ray machine is obsolete and mended with duct tape. The X-Ray chair was so worn that the dentist personally reupholstered it and spray-painted the footrest. Dental clinic staff are also being exposed to elevated levels of radiation because the walls enclosing the X-Ray area do not have lead in them.

Appropriate equipment is also needed by dental technicians whose responsibilities include making dentures, partial dentures, and bridges. They need a work space with proper ventilation, a heating unit to mix their materials, and a Chrome Cobalt machine for fusing porcelain to metal. Because their current work space does not have safe ventilation for the chemicals with which they are working, they have "jimmied" a duct system so they are not consumed by the fumes.

Hospital staff also expressed a need for items such as birthing beds, an ultrasound machine, incubators, a defibrillator, an infant warmer system, bassinet baby warmers, suction regulators, and a fetal monitor, just to name a few.

The annual average for live births at the hospital is 1,320, according to staff, with a high level of premature births. Babies are frequently "doubled up" in incubators due to the lack of equipment.

The facility does not yet have, but is working toward attaining, a fire suppression system. At one point, the hospital was at risk of losing its Medicaid funding due to fire-safety violations. "The hospital had persistent and serious fire-safety code deficiencies that jeopardized its ability to maintain the certification required for Medicaid funding," according to a December 2004 U.S. Government Accountability Office report titled, "American Samoa – Accountability for Key Federal Grants Needs Improvement."

The hospital obtained funding to install fire alarms and sprinklers; however, the sprinkler system does not work because of water pressure issues in American Samoa. The hospital has applied and received funding to install a water tank to provide the water pressure needed.

Transporting patients did not appear to be a concern for LBJ hospital staff members. With a $1 million budget and a 42-member staff, including five trained paramedics, dispatchers, and EMTs, the hospital's Emergency Management System has been flourishing. According to hospital staff, all vehicles contain oxygen and defibrillators, and staff are able to respond to emergency calls within minutes. They respond to an average of 400 to 500 calls per month and even service the outer islands.

Emergency staff do, however, have difficulty navigating the rough terrain on the island. Accessing patients may require them to drive up steep mountains and sometimes leave their vehicle at the bottom of a hill and trek up the mountain to reach patients in their homes. •

REPUBLIC OF PALAU

The Minister of Health was emphatic: The Belau National Hospital (BNH) of Palau has no problem recruiting or retaining physicians and nurses, and BNH has no shortage of "health professionals." When asked whether he believed Palau was an area suffering from a health professional shortage, the Minister of Health replied that he did not believe Palau was short of medical staff. "That would be news to me if we were," he stated. "There is a difference in opinion when you talk to the nursing staff. They are always saying we are short staffed."

Hospital physicians and staff members disagreed with the Minister, stating that BNH is severely understaffed, in need of trained medical professionals, and indeed a health professional shortage area.

The lack of qualified health professionals, as expressed by staff, is just one of many problems BNH is facing. With old, broken medical equipment and supplies; a cracking, crumbling building; and little training for employees, the quality of care for the local population is abysmal.

One physician at BNH openly disagreed with the Minister of Health stating that he feels BNH does have difficulty obtaining nursing staff and specialty physicians. He said retention is "absolutely" a problem and while they are "doing reasonably well, it's still a challenge. There are not enough, and the ones we have are not fully trained."

> "Palau residents have been designated a medically underserved population because of primary health professional shortages."

Another physician said, "Palau residents have been designated a medically underserved population because of primary health professional shortages." This physician also noted that "in the case of allied health workers, almost all are Palauan, but less than 7 percent are fully certified in their fields."

Nursing staff at BNH agreed that recruiting and retaining physicians is difficult and that there is an overall lack of specialty providers. And while BNH is able to recruit physicians from nearby areas like Japan and the Philippines, it still proves difficult. The lack of specialty physicians often leads to referring patients off island for care.

BNH typically sends 124 patients off island every year to receive specialty care that the hospital is unable to provide locally due to a shortage of specialty or tertiary care providers. All cases require 75 percent approval from a five-member review board that meets weekly to assess the necessity of sending patients off island. Most of the cases that are reviewed for off-island referral pertain to cardiovascular issues, kidney disease, or cancer care. Approval by the review board is only granted if it is determined that the patient requires a needed service that cannot be provided locally and if the patient is able to cover 55 percent of the total cost, which is $7,000 on average. Government funds cover the rest.

BNH also requires a 50-percent deposit up front by patients in order to receive approval. This referral process typically takes 3 days, at which point most patients are sent to the Philippines or occasionally to Hawaii. However, patients unable to cover their portion of the cost are simply not approved for off-island treatment. Furthermore, BNH does not approve off-island refer-

A two-laned and hardly elevated causeway is the only road that links one part of the island to the next (above). Both the causeway and the hospital's extremely close proximity to the water's edge (below) make hospital staff feel their location is too risky.

rals for patients suffering from terminal illnesses for which off-island treatment will not render a recovery.

While hospital staff said they do occasionally run out of beds for acute patients, they noted that approximately 10 acute care beds are regularly occupied with long-term patients. Hospital staff explained that normally immediate and extended family take care of most patients once they are released from the hospital. Some patients, however, who have no family to return to actually remain in the hospital for long-term care.

"We act as a skilled nursing facility," one staff member clarified.

BNH staff explained that these are typically patients who have been treated for their medical condition but still need help with everyday activities or some form of skilled nursing care.

"They stay for months or sometimes until they die," commented one hospital staff member, noting that these patients typically do not pay anything to the hospital during this time.

BNH staff also stated that they would like to construct a public health building in a safer location elsewhere on the island, which they believe would greatly decrease their vulnerability and allow for patients to continue receiving health care services in the event that something should happen to BNH. Hospital staff noted that if something happened to the nearby causeway, bridging one part of the island to the next, "We would lose our link to the community."

"We are always scared of typhoons because of our close proximity to the water," commented one staff

member. "We know this location is very risky."

BNH staff also recognized that much of their everyday equipment is old and wearing out.

"We have no maintenance plan to maintain the equipment," a staff member said.

Another hospital staff member clarified that while the hospital would like to better maintain its equipment, the problem lies in its lack of funding to do so.

"Yes we get funding, but not for maintenance," she explained. "The funding we do get is for fixed costs – personnel, supplies, fuel, just the basics we need to get by."

For example, BNH's main X-Ray machine is currently not functioning due to a software corruption. BNH staff have been waiting for some time for this to be repaired. One staff member said, "We do have a backup but it is reaching its lifespan. Not having our

main X-Ray really hampers our ability to do a lot of diagnostic tests."

Not only is much of BNH's equipment old and out of date, the actual facility is decrepit as well. A hospital staff member noted that particular areas of the mental health unit contained barred patient rooms, saying, "They look like jail cells! Changing this would be good."

And while the inside may be outdated, sections of the exterior, which are literally cracking and crumbling, have gone unrepaired for more than 3 years. Metal supports hold up sections of the hospital's roof to keep it from collapsing.

Metal supports have been attached to sections of the hospital's exterior to keep the roof from collapsing.

BNH physicians also expressed dismay for what they deem "very underdeveloped" emergency transport services.

"We need to improve the skills of those that man the ambulances," one hospital staff member said. "[The ambulance staff] can't even triage to assess the severity of the case. They just transport."

The same staff member stated that he believed it was necessary to improve emergency response training to those who staff the ambulances because the current lack of training only compounds patients' injuries or causes complications by the time they actually reach the hospital. Another staff member used a plane crash as an example, saying, "It would be scary to think that people would have almost no care on their way to the emergency room."

Staff noted that because of the shortage of ambulances, it may take hours for an ambulance to reach patients located in more remote areas.

In addition, BNH staff commented that they considered it imperative to improve the training of the public health nurses who work at the dispensaries. Staff explained that even though some patients may be closer in proximity to a dispensary, they often "just come straight to the emergency room because they can only deal with minor things at the dispensaries."

Finances are also of great concern. Hospital staff explained that due to outstanding balances with many of their suppliers, they often have difficulty receiving orders on time, or at all.

"The last 3 years we have been in a financial crisis," one hospital employee said, noting that BNH is attempting to slowly pay off its debts to old suppliers.

"We are constantly out of stock. We place the order and then just have to wait and see when it comes," another hospital staff member said.

A BNH nurse described the difficulties in obtaining simple everyday equipment and BNH's chronic shortage of supplies. She said there have been several instances where BNH has run out of bilirubin lights, the lights used in incubators. As BNH experiences a high incidence of jaundice in infants, the nurse emphasized the importance of having enough of these lights.

"A lot of times we buy them with our own money," she said. "Either we do this, or the babies may suffer."

The nurse also pointed out that they had run out of blankets and they currently have no infant IV pumps.

"If a baby is born with congenital problems and we don't have the proper equipment, the baby will probably die," she opined.

When BNH is not struggling to obtain everyday supplies, it seems that it is struggling to obtain pharmaceuticals. BNH staff members expressed frustration over their lack of autonomy, saying, "We go through local vendors. They tie our hands a bit."

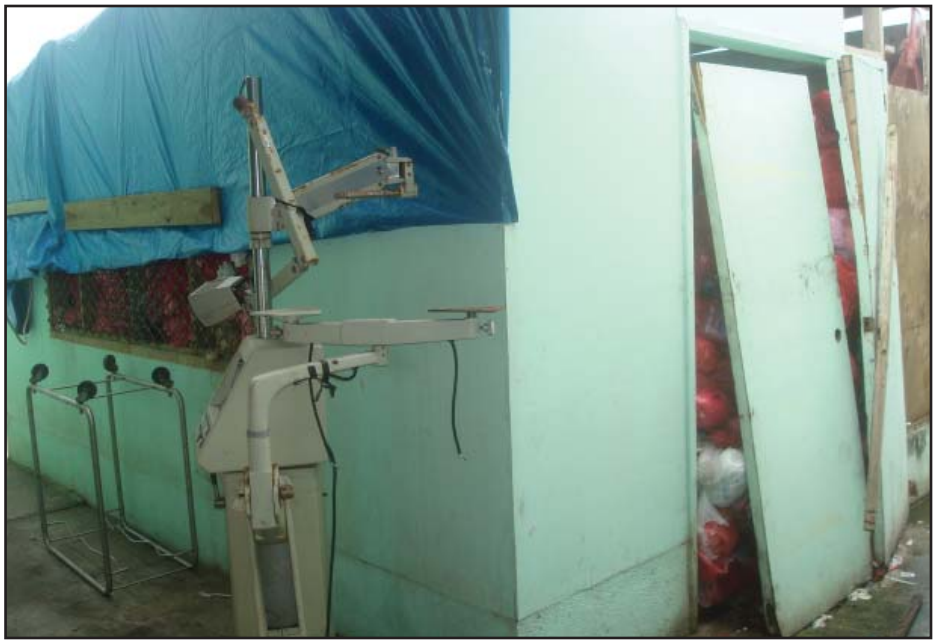
BNH staff noted that despite the fact that they purchase specific medications from their vendors for $35, $40, or $50 dollars, the hospital only charges patients $5 for each prescription. Furthermore, a nurse stated she knew of different vendors BNH could use and receive a 50 pack of medication for $4.50, whereas the very same medication purchased through the local vendors cost BNH $90 for a 10 pack.

BNH staff stated that they often run out of antibiotics. One staff member said, "We have been out of penicillin injections since last year."

BNH has been using oral penicillin tablets instead. BNH staff explained that they can turn to private local pharmacies in emergency situations, but the prices are often much higher. •

Republic of the Marshall Islands

The designated deposit area for biohazardous waste at Leroij Atama Medical Center (Medical Center) is a pale green building with double doors that are no longer attached to the building. Instead, they rest against the hundreds of red biohazardous waste bags that now tumble out of the entrance way. Bright blue tarps are nailed across the open roof of the building to protect the ceiling-high piles of waste from the elements. Open industrial-size trash cans overflowing with red biohazardous waste bags are scattered across the rear of the hospital; used syringes and latex gloves mixed with soda cans and Styrofoam cups are piled in a soggy mess from the recent rain. Neighboring homes sit just yards away from the debris. No fence or wall prevents community access to the piles of biohazardous trash and medical waste.



Bags of biohazardous waste peek out from behind the broken doors of the designated waste storage area.

The Medical Center is one of two hospitals located within the Republic of the Marshall Islands, which has a population of nearly 60,000 people spread across 29 atolls, and 5 main islands. The Medical Center is located on Majuro, the capital and most densely populated of the islands.

While the waste situation at the Medical Center may appear to be out of control, it does not end there. The hospital's incinerator site, located near the airport in Majuro, houses eight storage containers full of biohazardous waste, some of which have been sitting for so long they are completely overrun with vines. A hospital staff member stated that approximately 4 months ago the local waste management company said the hospital could no longer incinerate biohazardous waste until a new incinerator was installed. The accumulation

Biohazardous waste piles up everywhere behind the hospital. Based on hospital staff estimates, the hospital may have as many as 4,000 bags of biohazardous waste waiting to be burned.

The hospital plans to reopen the eight storage containers and burn all the waste once the new incinerator is installed.

of biohazardous waste behind the hospital and at the incinerator site is a product of 4 months of neglecting to incinerate anything.

According to a hospital staff member's estimate, the facility produces approximately 30 to 35 bags of biohazardous waste every day, which over 4 months could mean the hospital has more than 4,000 bags of biohazardous waste on its hands.

With daily temperatures in Majuro averaging 80 degrees Fahrenheit, none of the eight storage containers or the designated on-site biohazard building are temperature controlled. A hospital staff member noted that the hospital intends to open the containers and burn all of the waste as soon as a new incinerator is installed. This staff member also stated that the new incinerator has been sitting at the incineration site for months waiting to be installed. The installer stated that the equipment would be put in place within days of the OIG's visit; however, nearly a month later, follow-up contact identified that the incinerator was still non-functional.

The Medical Center is divided between an old wing constructed in 1986 containing conference rooms, physical therapy, the morgue, storage, housekeeping and maintenance, and a brand new wing that houses the majority of the medical wards, records management, and the administrative offices. In 2005, a portion of the old wing was destroyed by a fire. No lives were lost; however, millions of dollars in medical supplies were destroyed. Hospital staff noted that the walls of the old hospital wing are pre-fabricated and highly flammable, and despite the fact that plans are currently being finalized to demolish the old wing and build a replacement, the hospital has no fire emergency plan.

A dedication memorial outside of the new wing, which was completed in 2005, identifies the new structure as a "token of friendship and cooperation between Japan and the Republic of the Marshall Islands." This wing is furnished with state-of-the-art medical equip-

The new incinerator has been sitting as the incineration site for months, waiting to be installed.

ment, all complimentary from Japan and Taiwan. Hospital staff noted that the hospital continues to receive medical supplies such as wheelchairs as "gifts" from the two countries.

While the Medical Center may not struggle with obtaining physical equipment and supplies due to its close relationship with Japan, many staff members said they struggle to receive training.

The hospital's physical therapist expressed her frustration that she must find and obtain training for herself and her staff, noting that this is typically only accomplished through grants or gifts. She stated that being the only physical therapist searching for training options takes valuable time away from her primary task of working with patients.

A Medical Center pharmacist who had previously held an administrative position at the hospital stated that he felt the lack of training was a real problem and resulted in pharmacy technicians tackling work beyond their capacities. He expressed dissatisfaction that training was only available if it could somehow be obtained individually and felt it was not a hospital priority. The hospital's only embalming technician noted that he has never received formal training.

According to hospital administrators, the hospital currently deals with a medical records system that contains duplicate and missing charts. Two years ago, the Medical Center began implementing an electronic medical records system and began to transfer its inventory of records online. This process was halted when the hospital's server reached capacity and staff also realized they had a database that contained over 100,000 medical records for a population of only 57,000. Hospital administrators are still working to correct this problem.

Despite the fact that the Ministry of Health's Secretary of Health classified diabetes as "the number one cause of morbidity" in the Marshall Islands, the Medical Center no longer provides hemodialysis services. Hemodialysis is the most common method used to treat advanced and permanent kidney failure.

Diabetes is currently the most frequent cause of kidney failure, even when the disease is controlled. The Medical Center staff stated that they eliminated this service years ago because it was not economically feasible to provide. They also stated that they had no idea how many citizens in Majuro needed this service because according to a Medical Center administrative staff member, this population had either died or left the island for a place where this service is available.●

Boxes labeled "Love from Taiwan" contain medical supplies donated to the Medical Center (above). Japan also continuously donates items such as incubators to the hospital (below).

U.S. Virgin Islands
ST. THOMAS/ST. CROIX

Schneider Regional Medical Center is located on the island of St. Thomas.

In August 2006, the Virgin Islands Department of Health hired a 27-year-old female pediatrician for its community health center on St. Croix. One month later, after complaining of a severe stomachache, she had surgery at the Governor Juan F. Louis Hospital and Medical Center (JLH) to remove gallbladder stones. Within 2 days, she developed complications that led JLH physicians to arrange for her to receive specialty care in New York. Her condition only worsened, however, and physicians were unable to stabilize her for transport. She began to code every hour, her condition deteriorating through the night. By morning, she was dead.

Due to the lack of available specialists in the Virgin Islands, patients needing specialized emergency care, even those with the best health insurance and means to leave the island, often end up in life-threatening situations, sometimes ending in death.

This is just one of many problems hospitals in the Virgin Islands are facing. They also lack specialized nurses, having to hire outside of the Virgin Islands and pay double the normal salary; are burdened treating patients needing long-term care, who can end up staying for years; and must deal with deteriorating large-scale equipment, including an overworked hospital cooling system.

The U.S. Virgin Islands includes three main islands, St. Thomas, St. John, and St. Croix. Two hospitals, Schneider Regional Medical Center (SRMC), located on St. Thomas, and JLH, located on St. Croix, service these three islands and their population of approximately 108,448 people.

Due to the lack of specialists in the U.S. Virgin Islands, many patients are referred off island for care. Several barriers can stand between a patient and receiving this care, including the need for an accepting hospital, inadequate or an altogether lack of health insurance, and the sometimes extremely high cost of air transportation off island. Even with all of these factors covered, however, there are still instances in which patients are too sick to safely make the long plane ride.

SRMC officials noted that most often patients are referred off island for complex traumas, neonatal intensive care, complicated pregnancies and deliveries, and for severe burns. SRMC officials stated that the specialty services necessary to treat these conditions are not always available locally and therefore require off-island referrals.

One specialty service the hospitals in the U.S. Virgin Islands are severely lacking is mental health care. There is only one inpatient mental health facility for St. Thomas, St. John, and St. Croix, which maintains a mere 32 beds to provide care for chronically mentally ill patients. The Commissioner of Health said the Virgin Islands' lack of mental health services often forces patients to travel off island to receive care.

There are currently 27 patients from the U.S. Virgin Islands who are being treated within the United States' mainland for mental health issues, typically for schizophrenia or long-term clinical psychosis. The Commissioner explained the importance of treating mental illness in a comfortable and familiar setting, which cannot occur when patients are sent to the mainland. She also

stressed the importance of family involvement.

"You're away from your family in a strange environment," she said. "How much progress can we really expect them to make?"

The U.S. Virgin Islands Department of Health (DOH) covers all costs associated with off-island mental health care. The 27 off-island patients account for $2.1 million in DOH expenses per year. The Commissioner stressed the financial burden of treating these patients off island, citing instances where DOH has paid as much as $31,000 per month to treat emergency mental health cases.

To help alleviate these pressures, DOH recently began construction of an additional mental health facility and anticipates it will be completed within the year. The Commissioner noted that this facility will help "prepare individuals for the transition" from inpatient care to normal life.

JLH and SRMC also struggle to recruit specialists, especially critical care nurses. As a result, they are often left with no choice but to use "agency nurses," who are relocated to the U.S. Virgin Islands for short-term nursing positions of typically only 3 months. JLH pays $115,000 per year for an agency nurse, as opposed to $45,000 for a non-agency nurse. According to JLH administrators, the cost for agency nurses includes the benefits they receive, such as housing and transportation.

> "We've had individuals who lose their lives trying to come in [to the U.S. Virgin Islands]. There are very pregnant women who risk flying just to have a baby on American soil."

JLH officials said that due to the short length of stay for agency nurses, they are constantly training new staff, calling it "a never ending process."

Officials noted that because they can only interview agency nurses by telephone for future positions, they are unable to truly know if the nurses will be a "good fit" for the hospital. There have been times, JLH officials recalled, when they "have been stuck having to train or educate" agency nurses because the skills they anticipated the nurses would have "just weren't there" when they arrived in the U.S. Virgin Islands.

One staff member commented that "there is no commitment from this type of personnel." She added, "A lot of them look at it like a vacation and they come with an expectation that they can enjoy the environment, instead of a focus on the organization."

As the cost of obtaining specialty nursing staff rises for hospitals in the U.S. Virgin Islands, the cost of uncompensated care – patients who do not pay after being billed by the hospital – continues to skyrocket. SRMC and JLH officials stated that they incur approximately $40 million a year in uncompensated costs because they are unable to refuse treatment to any person.

"Federal law says if a patient comes to our door we must treat them or stabilize them," an SRMC official said.

While the hospitals have difficulty providing care to U.S. Virgin Islands citizens, they also struggle to provide care to non-residents, including tourists and the growing number of undocumented individuals arriving from places like Haiti and the Dominican Republic.

"We can't refuse anyone," the Commissioner said. "We've had individuals who lose their lives trying to come in [to the U.S. Virgin Islands]. There are very pregnant women who risk flying just to have a baby on American soil."

SRMC officials explained that some of the difficulties associated with treating undocumented individuals are that they often do not speak English and only come to the hospital when they are experiencing severe medical problems that require complicated and costly treatments.

Along with the constant stream of patients both documented and undocumented, both SRMC and JLH struggle housing patients long-term. JLH staff members stated that there are approximately 9 to 10 beds occupied at all times with patients who are ready for discharge yet still need daily assistance or skilled nursing services, and many remain at the hospital until they die. Some have stayed for as long as 14 years.

JLH staff explained that while family members and relatives typically fill the role of caregiver for patients needing this type of care, there are times when patients have no family to return to.

"Sometimes the families have abandoned them; sometimes they don't have families; sometimes the families just don't want to deal with it," one JLH staff member said.

Currently, there are only 200 long-term care beds available on St. Croix, and JLH officials estimate they would need at least three times as many beds to fill the long-term care needs of the community.

SRMC officials noted that they experience the same problems. One staff member said SRMC has even tried

to find care for these patients off island, stating, "The challenge we have is finding home health care that will accept these patients that can't pay. We know staying in the hospital only increases their morbidity."

In addition to housing patients needing long-term care, SRMC and JLH staff also struggle with their quickly aging and deteriorating large-scale equipment. For example, SRMC's cooling system is currently operating at 100 percent of its capacity with four chillers that run 24 hours a day, 7 days a week. SRMC staff members stated that there is no ability to turn one of the systems off without the effects being felt immediately by patients. Because the hospitals have no capability to shut these chillers off, maintenance staff must repair them while they are running, a risky endeavor.

Juan F. Louis Hospital and Medical Center is located on the island of St. Croix.

The chillers are also located on the hospital roof, a location staff members note exposes the equipment to the sometimes harsh elements, which only aids in the premature deterioration of parts.

Due to an antiquated water heating system and ongoing maintenance issues, SRMC has also struggled to provide consistent hot water to patients and doctors. Additionally, because the U.S. Virgin Islands Water and Power Authority has recently been experiencing problems, the hospital loses power often and the backup generators must kick on. Because of the generators' frequent use, one of the generator's radiators has now developed a severe leak. An SRMC staff member said, "Every time we run it, the leak gets bigger and bigger and bigger."

SRMC also struggles with disposal of biohazardous waste. Both SRMC and JLH ship biohazardous waste off island. One SRMC official stated that "EPA banned our incineration operations in 1996 due to the fact that the hospital was located in a residential area."

Since this time, SRMC must freeze infectious waste in a 3,000-square-foot freezer, package the waste, and ship it to Florida every 2 weeks. This process costs SRMC $300,000 a year.

Additionally, because of the lack of physical storage space at SRMC, in 2005, SRMC paid to ship a large portion of its older medical records to be stored and maintained by a company in Miami, FL. Staff stated that they regularly incur additional expenses to retrieve and send patients' charts from Miami to SRMC; they also noted that this can be a timely process.

While hospitals in the U.S. Virgin Islands may often look to the U.S. mainland for medical and auxiliary services, JLH officials expressed their frustration in being compared to U.S. medical facilities. "There is a very cynical population of statesiders," one JLH physician said. He commented on his frustration in being compared to stateside hospitals and being expected to perform at the same standards and provide the same services with less resources and a starkly different situation. "We are the only show in town," the physician said. "We have such meager resources and millions and millions of dollars in uncompensated care, yet we are expected to perform at the same standard as the larger players." Another hospital official expressed a similar sentiment, saying, "The ironic part of it is, whatever pertains to the best funded hospital in the United States also pertains to us."

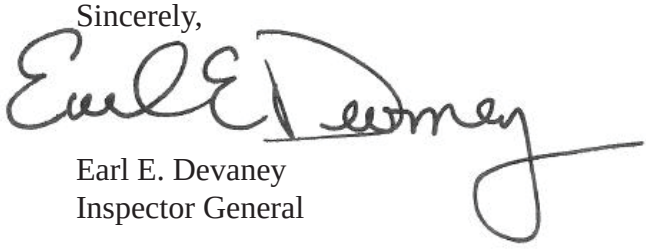
However, what pertains to hospitals and patients on the U.S. mainland does not necessarily always apply to those in the U.S. Virgin Islands, most notably when it comes to financial aid from U.S.-based pharmaceutical companies. Many pharmaceutical companies in the United States have patient assistance programs that will cover the entire cost of qualifying patients' pharmaceuticals. SRMC officials recalled instances where patients in the U.S. Virgin Islands have been ineligible for these benefits due to the fact that "they were not part of the contiguous states." •

RECOMMENDATIONS

We believe it is profoundly difficult to recommend solutions or prioritize expenditures, as we uncovered a myriad of health care problems within the seven insular areas. No simple solution lends itself to correction of these problems; however, should any form of relief, aid, or assistance at any time become available, it is our recommendation that the following five areas are the first to be addressed:

- The shortage of fundamental supplies and medicines
- Inadequate management of patient records
- The shortage of specialty physician care, creating the need to transport critically ill patients off island
- Inadequate, antiquated, and damaged facility infrastructure
- Inappropriate biohazardous waste disposal

Sincerely,



Earl E. Devaney
Inspector General

Report Fraud, Waste, Abuse And Mismanagement

Fraud, waste, and abuse in government concerns everyone: Office of Inspector General staff, Departmental employees, and the general public. We actively solicit allegations of any inefficient and wasteful practices, fraud, and abuse related to Departmental or Insular area programs and operations. You can report allegations to us in several ways.

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