

# GUAM Medical Services Delivery Plan

## Component 1: Medical Providers Baseline Assessment



December 2012

*Page intentionally left blank.*

---

# GUAM

## MEDICAL SERVICES DELIVERY PLAN

---



**Office of the Governor of Guam**  
P.O. Box 2950  
Hagåtña, Guam 96932  
(617) 472-8931

Component 1: Medical Providers Baseline Assessment

**December 2012**

*prepared by:*

GOVERNOR'S ADVISORY CONSULTING TEAM

This study was prepared under contract with the Government of Guam, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of the Government of Guam and does not necessarily reflect the views of the Office of Economic Adjustment.



**Guam Medical Services Delivery Plan**  
**Component 1:**  
**Medical Providers Baseline Assessment**

**Table of Contents**

**Section 1: Introduction**

Plan Overview, Component 1 ..... 1-1  
 Key Findings ..... 1-2

**Section 2: Public Providers**

Guam Memorial Hospital Authority ..... 2-3  
 Department of Public Health and Social Services ..... 2-16  
 Department of Mental Health and Substance Abuse ..... 2-28

**Section 3: Private Providers**

Interview and Site Visits ..... 3-2  
 Private Providers List ..... 3-3  
 Private Provider Survey ..... 3-23  
 Key Survey Findings ..... 3-26

**Section 4: Department of Defense Healthcare Facilities**

Guam Naval Hospital ..... 4-2  
 Naval Branch Health Clinics ..... 4-4  
 Veterans Clinic ..... 4-5  
 Andersen Clinic ..... 4-5

**Appendix A. Public Provider Survey**

**Appendix B. Private Provider Survey**

**Tables**

Table 2-1. Major Inpatient Unit Occupancy ..... 2-6

Table 2-2. GMH Bed Capacity by Acute Care Unit..... 2-6

Table 2-3. GMH Non-Acute Care Bed Capacity.....2-7

Table 2-4. Current Staffing at NRCHC..... 2-21

Table 2-5. Current Staffing at SRCHC ..... 2-22

Table 3-1. Responses to Hours of Operation for Private Providers..... 3-26

Table 3-2. Percent of Daily Visits that are Same-Day Appointments ..... 3-31

Table 3-3. Estimated Number of Patients for Each Service in the Prior Week..... 3-36

Table 3-4. Number of Key Work/Patient Areas at Facilities..... 3-38

Table 3-5. Number of Full-Time Staff..... 3-43

Table 3-6. Number of Part-Time Staff..... 3-44

Table 3-7. Number of Equipment at Responding Facilities ..... 3-45

Table 3-8. Utilization Rate at Responding Facilities ..... 3-45

Table 3-9. Percentage Served by Age Group ..... 3-45

Table 3-10. Percentage Payments by Type ..... 3-46

Table 4-1. Space Change Between the Current Naval Hospital and the New Naval Hospital..... 4-4

**Figures**

Figure 2-1. Public Provider Locations ..... 2-2

Figure 3-1 Private Provider Locations.....3-5

Figure 3-2. Handling After-Hour Calls ..... 3-27

Figure 3-3. Is This Facility a Solo Practice? ..... 3-28

Figure 3-4. Type of Practice Specialty ..... 3-29

Figure 3-5. Ownership of the Provider ..... 3-29

Figure 3-6. Type of Facility..... 3-30

Figure 3-7. Same-Day Appointment Availability..... 3-31

Figure 3-8. Average Timeframe to Get an Appointment ..... 3-32

Figure 3-9. Availability of In-Home Care Services ..... 3-32

Figure 3-10. Availability of Electronic Consultations..... 3-33

Figure 3-11. Availability of Specialty Diagnostics ..... 3-34

Figure 3-12. Types of Services Available ..... 3-35

Figure 3-13. Adequacy of Key Work / Patient Areas ..... 3-39

Figure 3-14. Electronic Claims Submittal ..... 3-40

Figure 3-15. Usage of Electronic Records..... 3-41

Figure 3-16. Electronic Exchange with Other Providers ..... 3-41

Figure 3-17. Plans to Implement Electronic Records ..... 3-42

Figure 3-18. Percentage of Patients Who are Active Military or Dependents..... 3-47

Figure 3-19. Percentage of Patients Who are Not Guam Residents ..... 3-48



# Section 1: Introduction

## Inside Section 1 . . .

Plan Overview, Component 1 ..... 1-1

Key Findings..... 1-2

## Plan Overview, Component 1

The Guam Medical Services Delivery Plan (Delivery Plan) is a part of the Office of the Governor’s initiative to improve the healthcare system on Guam for both current residents and future generations. The Delivery Plan builds upon the recently completed Five Year Health and Social Services Strategic Plan (Strategic Plan), which is a critical policy level plan to guide future health and social service decision making and implementation efforts on Guam.

The Delivery Plan is broken down into five components, or phases. The first component, the Medical Providers Baseline Assessment, is presented here to build upon the Strategic Plan and provide a detailed approach for implementing key components of the Strategic Plan’s policy guidance. The Delivery Plan will specifically address how medical services should be delivered on Guam to meet both short-term and long-term healthcare needs on Guam. The five Delivery Plan components are as follows:

- **Component 1:** Medical Providers Baseline Assessment
- **Component 2:** Provider-Level Needs Assessment
- **Component 3:** Medical services Delivery Plan
- **Component 4:** Medical Services Infrastructure Plan
- **Component 5:** Financial Feasibility Implications

The goal of the Baseline Assessment was to gather information on the civilian medical service providers on Guam, including private providers, service organizations, and government providers. By gathering this information, this assessment is meant to comprehensively document, for the first time, all medical services that are available on Guam. The information gathered during this Component will serve to move forward with the next four components and develop the final document.

The methodology for identifying private health providers on Guam was initiated by reviewing through the Health Providers Index that was developed during the Strategic Plan. This list was supplemented by browsing the local Guam phone book to obtain additional providers, and through meetings with public and private providers who identified additional facilities that were not previously identified. Once the pre-final list of 80 providers was established, the list was narrowed down by removing certain facilities that were determined not to be applicable for the purposes of the Delivery Plan, including dental, optical, and behavioral / mental health providers (NOTE, although private behavioral and mental health providers were not surveyed, the Guam Department of Mental Health and Substance Abuse was included in the Delivery Plan as an important component of public services available). Additionally, some of providers identified as part of the Strategic Plan were determined to no longer be in service, and were thus removed from the list. The final list was narrowed down to 58 valid private health provider facilities.

The main data gathering tool for Component 1 was the development of a Provider Survey. Although they were similar in nature and questions asked, two separate surveys were distributed: one for public providers of health and social services and one for private providers. The government provider survey was distributed to the three major government entities that provide healthcare services: Guam Memorial Hospital (GMH), the Department of Public Health and Social Services (DPHSS), and the Department of Mental Health and Substance Abuse (DMHSA).

The private provider survey was distributed to the 58 providers that were identified through the process mentioned above. The results of the surveys were assessed based on the respondent. The results received from government providers were used to develop the discussions of the services offered and shortfalls or setbacks in providing services to patients, discussed in Section 2: Public Providers. The results received from the private providers were compiled into a database and analyzed as a whole to provide commentary on the health and social services, types of health professionals, demographics of patients served, etc. that are either available on the island or lacking in general. A breakdown of the private provider survey results are discussed in Section 3: Private Providers.

During the meeting with the DPHSS Director, a short list of some of the major private provider facilities was identified. From this list, three facilities were chosen to do a visual survey / non-engineering facility walkthrough

to gain a better understanding of some of the services and facilities available on Guam. During these site visits, extended staff interviews were conducted to determine impacts to providing service to patients faced both at the facility and on Guam as a whole. These facilities were also provided with a survey and asked to return it.

## Key Findings

The key findings identified represent the most commonly cited and most concerning issues regarding Guam's healthcare system and services.

### *Public Providers*

- All of the existing functions of DPHSS are not contained within one building, but are disbursed in location. If centralized in one building, efficiencies of work, productivity, shared staffing, and use of equipment would greatly enhance the ability to provide critical health and social services.
- DPHSS satellite facilities (including Division of Senior Citizens, MIP, Medicare, Health Professional Licensing Office, Immunizations, WIC, and SNAP) are spread out away from the central facility, causing some disconnection.
- The DPHSS Central Public Health facility is too old, poorly laid out, and has been segmented over the years, resulting in inadequately sized staff and patient areas and poor flow from one area to another.
- The location of GMH makes it difficult to access by certain communities.
- The DPHSS Northern Regional Community Health Center is outdated and poorly designed to support current needs.
- There is a lack of public provider health facilities in the southern portion of Guam.
- The availability of sufficient storage space for medications and supplies is a major problem for public provider facilities.
- The DMHSA facilities are in disrepair, causing great safety concerns for patients.

- DMHSA is currently under permanent federal injunction and is required to hire additional staff and construct a new facility to address their deficiencies. The existing DMHSA facility does not meet current standards or needs. In order to meet the Federal requirements, the government of Guam will have to borrow money.
- DMHSA reported substandard air quality in the building, fire suppression risks, and mold problems.
- The Government of Guam wants to build a new DMHSA facility; however, the federal government wants to keep the current facility and upgrade / add to it. The current condition of the facility and the extensive repairs that would be needed may make this cost prohibitive.
- Security upgrades are needed for patient safety.
- The DMHSA facility provides the only inpatient facility in the West Pacific. Navy relies heavily on them. If the military needs are more long term however; the individual is usually transported off-island.
- Many of the public facilities are in poor condition and lacking adequate equipment. Upgrades to facilities and equipment cannot be conducted without proper funding and resources.
- The ratio of hospital certified hospital beds at GMH per 1,000 population is significantly lower than the national average, which reduces ability to meet patient demand.
- GMH does not currently have functional equipment to perform MRIs, nuclear medicine, mammograms, and a variety of other procedures.
- DPHSS's diagnostics laboratory is antiquated and does not have the capability to analyze all the samples they test. It is currently only a Level 1 lab, but a Level 2 lab is needed to provide the capability to test, analyze, and confirm the presence of air, food, and water-borne contaminants that impact human health in a timely manner.
- The process of procuring appropriate equipment, parts, and medications through the Government of Guam is often slow and inefficient, resulting in not having the necessary resources to effectively serve patients.
- The shortages in qualified staff (both medical and administrative) limits the services that can be provided, the number of patients that can be treated, and the timeliness of services being provided.
- The public providers on Guam suffer from shortages in necessary qualified medical professionals for many types of medical specialties, due to a variety of factors including lack of funding, and problems hiring medical professionals.

### *Private Providers*

- Typical range of hours of operation for medical facilities: Monday through Friday 8 a.m. to 6 p.m.
- Same day appointments are unlikely
- Insurance is one of the biggest inhibiting factors of providing services to patients for many private providers. Sometimes providers have to wait too long for claims to be approved before services can be provided, but sometimes they can't wait for the patient's sake. Also, certain types of medication must receive authorization from insurance companies before it can be administered to patients.
- Many providers are losing patients to the Philippines or other nearby countries because it is cheaper for insurance companies to send patients there than be treated on Guam for some types of services or procedures. When patients travel to these areas for treatment, it is often difficult to get medical records.
- Some patients have no insurance and cannot be seen. Private providers have experienced problems getting reimbursement for government insurances much as MIP Medicaid and Medicare and have been forced to cut back on seeing patients covered by these insurance programs.
- There are an alarming number of patients lacking insurance coverage because of costs, thus canceling their appointments or procedures.

- There are shortages in the number of qualified medical professionals in several specialty areas of care, thus these services cannot be provided on Guam. This is further exacerbated by the inability to provide certain services, such as kidney transplants, due to a lack of facilities.
- The lack of surgical equipment at GMH affects private providers who are on call or provide services at the hospital.
- Additional surgeons are needed on-island.
- There is a general inability to keep up with patient demand, with a high number of patients requesting same day appointments that cannot be accommodated due to full schedules.
- There are a number of medical professionals that are lacking on Guam to adequately support the population, including:
  - dermatologist;
  - gastroenterologist;
  - rheumatologist;
  - pulmonologist;
  - pediatric cardiologist;
  - neurosurgeon; urologist;
  - hematologist,
  - biomedical engineer; and
  - ear, nose, and throat doctor
- There is a doctor on island who can perform kidney transplants, but there are no facilities available on Guam to perform this operation, so patients must leave Guam.



## Section 2: Public Providers

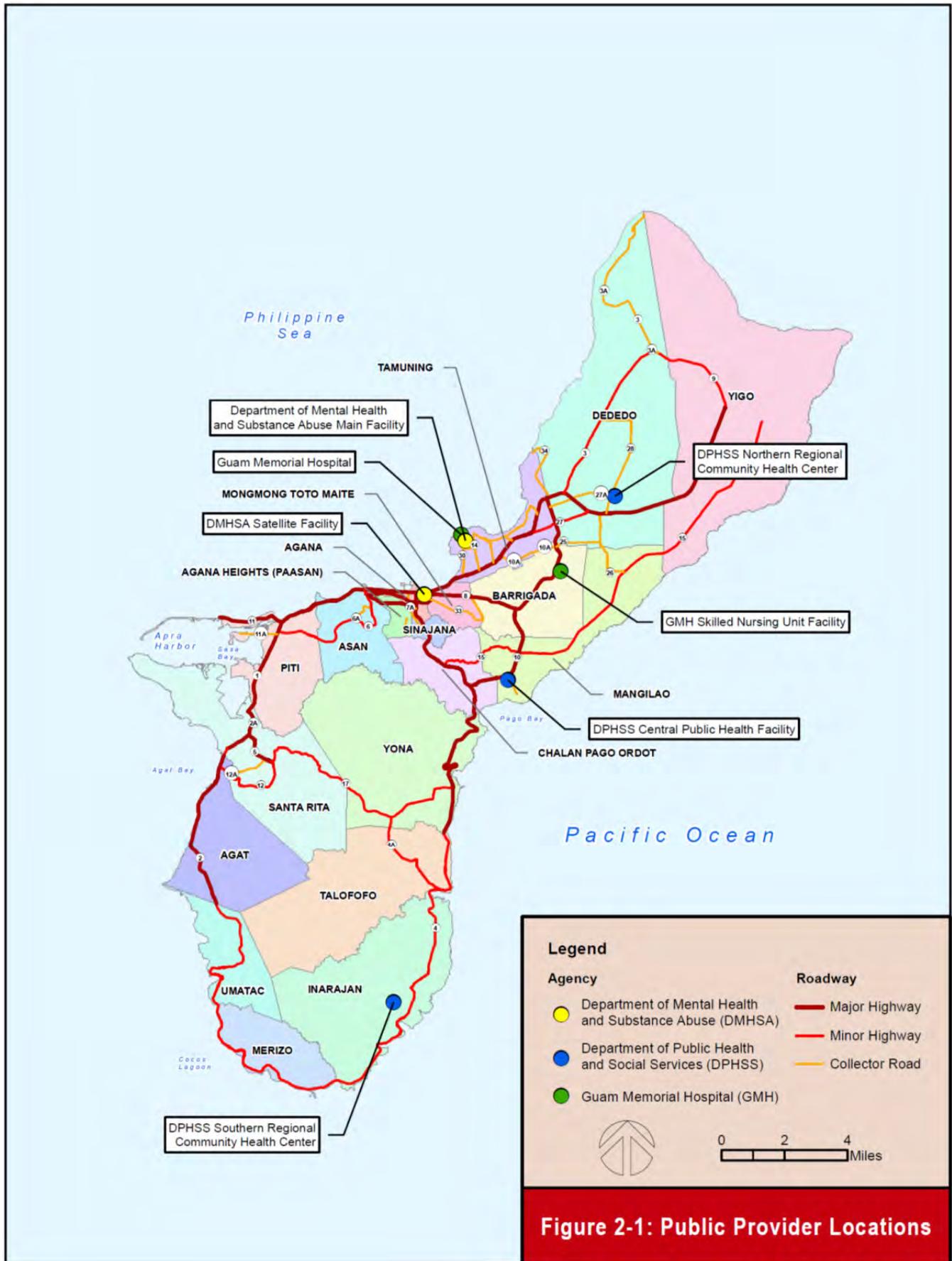
### Inside Section 2 . . .

Guam Memorial Hospital Authority..	2-3
Department of Public Health and Social Services .....	2-16
Department of Mental Health and Substance Abuse .....	2-28

*This section provides a summary of the major public health facilities and providers on Guam and a discussion of their current operations and issues that impact serving patients. Public providers are those that are operated by the Government of Guam. The three major health provider agencies within the Government of Guam are the Guam Memorial Hospital Authority, which operates Guam Memorial Hospital and the Skilled Nursing Unit Facility, the Department of Public Health and Social Services, which operates the Central Health facility and the Northern and Southern Regional Community Health Centers, and the Department of Mental Health and Substance Abuse, which operates their main facility and several other satellite facilities. These facilities provide services to all residents of Guam. Figure 2-1 shows the locations of the various public provider facilities on Guam.*

*Each of the public providers were visited during a site visit and interview in order to gather information on the physical accommodations of the facilities, as well as glean first-hand information from staff about the services offered and impediments to providing services. During the site visits, the provider surveys were also given to staff to fill out in addition to the one-on-one interviews. Surveys were received back from a number of the various departments or units within the facilities, but did not address all facilities and services. The information gathered during the site visits, interviews, and survey results were used to develop the facility write-ups in this section.*

*A copy of the Public Provider Survey as well as a letter from the Office of the Governor that explains the purpose of the survey and the project are included in Appendix A.*



**Figure 2-1: Public Provider Locations**

## Guam Memorial Hospital Authority

Guam Memorial Hospital Authority (GMHA), a semi-autonomous authority, is the designated authority in charge of the only public hospital on the island. Guam Memorial Hospital (GMH) serves as Guam's primary provider of acute healthcare services and is currently Guam's only provider of emergency and acute care services available to civilian residents, and is also utilized by some of the neighboring islands in the Western Pacific. As of this report, outpatient services at GMH include Emergency Medicine Department (EMD), Operating Room (OR), Radiology, Respiratory Care and Rehabilitative Services, and Laboratory. GMH operates a 24-hour emergency room, the only public one on the island. The ambulance fleet that transports patients to the emergency room is managed by the Guam Fire Department (GFD). The major units within the hospital that provide specific types of services are:

- Emergency Medicine Department
- Hemodialysis Unit
- Laboratory
- Operating Room
- Radiology Department
- Respiratory Care and Rehabilitative Services
- Special Services Department
- Labor and Delivery Unit
- Intensive / Critical Care Unit

In July 2010, GMH earned full Joint Commission accreditation after losing it in 1983 and striving to regain it over the years. Accreditation by the Joint Commission, which evaluates hospitals based on national patient safety goals, medical staffing, healthcare quality, and other categories, symbolizes that a hospital meets or exceeds national performance standards and is committed to meeting safe, high quality, and best value healthcare. The current accreditation certificate is valid through May 1, 2013. The accreditation does not include the off-site Skilled Nursing Facility, which has different accreditation guidelines as a long-term care facility.

GMH holds several other certifications and accreditations as well, including certification by the US Centers for Medicare and Medicaid Services, its laboratory is accredited by the College of American Pathologists, its blood bank is registered with the US Food and Drug Administration, and its mammography services are

accredited and certified by the American College of Radiology and the US Department of Health and Human Services.

While the hospital's primary service market is the civilian residents of Guam, the secondary market comes from neighboring islands in the Western Pacific, such as the Commonwealth of the Northern Mariana Islands (CNMI) and the Federated States of Micronesia (FSM).

As a result, Guam is considered a regional hub for medical services. This can cause some challenges when treating patients from other islands or tourists from other parts of the world who have different cultural medical customs and may not be familiar or comfortable with the services provided at GMH.

The staff at GMH facilities that were interviewed during the February 2012 site visit and walkthrough were:

- Paul Moroni, Program Coordinator
- Maria Perez, Guest Relations Coordinator
- Craig Guevara, Hospital Facilities Maintenance Assistant Manager
- Dolores Pangelinan, Buyer Supervisor II
- Jennifer Cruz – Surgical Ward
- Angie Guingao – Pediatric Ward
- Lizel Concepcion – Telemetry Unit
- Veronica Sensin – Hemodialysis Unit
- Michael Morta and Franklin Babuta – Bio-Medical
- Avelina Opena – Nursery Department
- Valerie Meno – Labor and Delivery Department
- Marivis Guinco – OB Ward
- Mercy Estira – Operating Room
- Bannuar Quaoit – Recovery Ward
- Emmanuel Castillo – Radiology Department
- Mike Lin – Pharmacy
- Jesse James Manibusan – Warehouse
- Jess Bamba, Inventory Manager – Warehouse
- Jayson Gozum – Acting SNU Administrator

## Existing Conditions

### Guam Memorial Hospital



Guam Memorial Hospital

GMH is located at 850 Governor Carlos G. Camacho Road in the Village of Tamuning. It is situated off of Marine Corps Drive, the primary road that connects between the northern part of Guam and extends south to Naval Base Guam. In addition, its location in Tamuning is relatively close to the most populated areas of Guam, which are the Villages of Dededo and Yigo and is centrally located on Guam. Under normal conditions, GMH is fairly easily accessible to residents living within the most populated areas of Guam. However, access from the southern portions of the island is more difficult due to the distance and the smaller, curvier roads that lead directly north.

Staffing data was not made available as part of this data collection; however, based on the most recently provided data, GMH's medical staff consisted of 77 members. Medical professionals at GMH represent a broad spectrum of clinical specialties; however, several critical specialties are not represented, thus associated services cannot be provided. Notably, GMH is not staffed by any Continuous Ambulatory Peritoneal Dialysis (CAPD) Nurses, clinical psychologists, physician assistants, or surgical assistants, among others. (Guam Statistical Yearbook 2008) Of the 77 medical staff, 52, or 67.5%, are Board certified. In addition to the medical staff that are employed by GMH, there are another 97 medical professionals that are privileged to practice at GMH, 83.5% of which are Board certified.

GMH provides a wide variety of services for both inpatient and outpatient care for adults and children. The services provided at GMH include:

- 24-hour emergency room and services,
- cardiac catheterization lab,
- operating room,
- labor / delivery, obstetrics, and nursery,
- critical and intensive care (neonatal, pediatric, and adult),
- skilled nursing care,
- inpatient renal dialysis,
- radiology,
- CT scan,
- EEG / EKG / EMG lab
- gastroenterology,
- interventional radiology,
- MRI (Not currently operational due to damaged equipment),
- neurosurgery,
- nuclear medicine (Not currently operational due to inadequate personnel and equipment),
- gynecological surgery,
- Ear / Nose / Throat surgery
- orthopedic surgery,
- plastic surgery,
- post anesthesia care unit,
- thoracic surgery,
- vascular surgery,
- mammography (Not currently operational due to damaged equipment),
- ultrasound diagnostic services,
- laboratory and blood bank,
- telemetry-progressive care,
- respiratory care,
- physical, occupational, and recreational therapy,
- dietetic services,
- social services,
- pastoral care and Chapel,
- patient education, and
- medical library.

GMH operates its own pharmacy for providing medications to patients. The pharmacy manages a warehouse and keeps medications on hand. Some medications, such as cancer medications, are made at the hospital. Certain types of medications are kept in large stock due to the length of time it takes for them to arrive from the US mainland, and the potential need for them in large quantity. In general, the pharmacy tries to keep at least a four month supply of necessary medications. The pharmacy operates 24 hours a day, 7 days a week, and must have 2 pharmacists working at all times.

GMH operates a storage warehouse for supplies and equipment to help the hospital run smoothly, or to provide materials / medications / procedures to patients. The warehouse is two stories tall, but still does not have enough room for all supplies that are taken to the warehouse for storage.

There are many expansion projects in the works for GMH. Several feasibility studies are in progress or have recently been completed to upgrade parts of the hospital and its facilities. The Emergency Department and Intensive Care Unit / Critical Care Unit (ICU / CCU) are underway on a significant expansion project, with a projected completion date of between January and March 2014.

The Emergency Department is currently 5,400 square feet and will be expanded to approximately 15,000 square feet. The new amenities in the Emergency Department will include:

- a large, external permanent decontamination system,
- one multipurpose suture / cast room,
- one satellite laboratory room,
- two state-of-the-art trauma rooms,
- two multipurpose isolation and decontamination rooms,
- two non-monitored examination stations, one multipurpose exam room,
- twelve state-of-the-art monitored examination stations, and
- upgraded waiting, triage, registration, utility, storage, office, and lounge rooms and areas

The CCU is currently 2,539 square feet and will be expanded to approximately 7,870 square feet, and increase from a 10-bed unit to a 15-bed unit (including two isolation rooms), with most rooms being approximately 200 square feet in size, as opposed to the current 120-square-foot rooms. Space will also be included to support the following functions:

- clean and soiled utility rooms, multipurpose conference room,
- family waiting room,
- nourishment and medication rooms,
- medical director and charge nurse rooms,
- MD / RN lounge, and
- medical supplies and equipment storage rooms.

There are also plans in the works for structural upgrades, transformer power upgrades to bring them up to National Electric Code standards, and a parking lot expansion.

The hospital's Education Department has a library and training room area that can be used by healthcare providers. The library contains consumer health resources, books, magazines, and journals for reference that any staff in the hospital can use. The library is also equipped with computers for internet research. The temporary training room has a capacity of 35 people. The Education Department was moved from its previous location due to the wall hardening project taking place at the hospital. The previous location had 100 seats for training or meetings.



*The library provides a good resource for medical professionals and staff at GMH*

**Inpatient Care**

Inpatient care is defined as a patient who is hospitalized for 24 hours or more. At GMH, inpatient care consists of acute care units where patients are admitted. There are nine acute care units at GMH, as outlined below.

- Surgical (4th floor)
- Medical Surgical
- Medical Telemetry
- Progressive Care Unit (PCU)
- ICU / CCU
- Pediatrics
- Pediatric ICU (PICU)
- Obstetrics
- Medical Surgical Annex (Old Surgical) (3rd floor)

The hospital also has a Neonatal Intensive Care Unit (NICU) and Intermediate Newborn Unit that are not considered acute care units. The Old Surgical Unit is also referred to as the Medical Surgical Annex because it includes additional beds in the event there is an overflow of acute care patients than can be supported by the other units. Table 2.1 shows the average stay and average occupancy for each major inpatient unit.

**Table 2-1. Major Inpatient Unit Occupancy**

Acute Care Unit	Average Stay (days)	Average Occupancy
Surgical (4 <sup>th</sup> floor)	5	79%
Medical Surgical	Varies	91%
Medical Telemetry	8-10	90%
Progressive Care Unit	N/A	N/A
Intensive Care Unit / Critical Care Unit	Varies	88%
Pediatrics	5	50%
Pediatric ICU		
Obstetrics	1-3	70%
Medical Surgical Annex (3 <sup>RD</sup> floor)		

Source: GMHA Hospital Facts and Figures Brochure, August 2011

**Outpatient Care**

Outpatient care describes a visit to a hospital or associated facility for diagnosis or treatment that takes less than 24 hours. GMH offers a variety of outpatient services, including the Emergency Medicine Department (EMD), Laboratory, Operating Room (OR), Radiology, Respiratory Care and Rehabilitative Services, and Special Services.

**Hospital Beds**

In 2008, with a total of 158 acute care beds, GMH had a ratio of 0.9 acute care beds per 1,000 population. This ratio is representative of the ability and capacity of providing acute care medical services. Comparatively, this is much lower than the 2008 ratios of Hawaii (2.4 beds per 1,000 population) and the US total (2.7 beds per 1,000 population). Additionally, Guam’s hospital bed capacity is less than half that of the US Census Pacific Division (composed of Alaska, California, Hawaii, Oregon, and Washington) hospitals, which have a ratio of 2.1 beds per 1,000 population. This is of particular concern due to Guam’s status as a regional hub for treatment of patients in the region. The most current (2011) breakdown of bed capacity by GMH’s acute care unit type is presented in Table 2-2.

**Table 2-2. GMH Bed Capacity by Acute Care Unit**

Acute Care Unit	Bed Capacity
Surgical (4 <sup>th</sup> floor)	33
Medical Surgical	28
Medical Telemetry	20
Progressive Care Unit	6
Intensive Care Unit / Critical Care Unit	10
Pediatrics	22
Pediatric ICU	3
Obstetrics	20
Medical Surgical Annex (3 <sup>RD</sup> floor)	16
<b>TOTAL BEDS</b>	<b>158</b>

Source: GMHA Administrative Manual, March 2011

GMH does have 105 additional beds that are not considered acute care beds. These types of beds are used for services associated with minor operation procedures, emergency rooms, childbirth, and other less lengthy procedures. These beds are shown by unit / department in Table 2-3.

Table 2-3. GMH Non-Acute Care Bed Capacity

Unit / Department	Bed Capacity
Inpatient Hemodialysis	9
Emergency Medical Department	18
Emergency Room Annex	8
Operating Room	10
Labor and Delivery	14
Nursery	32
Outpatient Hemodialysis <sup>1</sup>	14
<b>TOTAL BEDS</b>	<b>105</b>

Source: GMHA Administrative Manual, March 2011

Note: <sup>1</sup> The Outpatient Hemodialysis unit was closed in October 2011

Thirteen rooms at the hospital and four rooms at the Skilled Nursing Facility are able to be used as certified airborne infection isolation rooms. In addition, GMH has the capability to utilize 49 beds as negative pressure beds. Negative pressure means that the rooms are equipped with a ventilation system that can be engaged to stop the airflow between the room and adjacent rooms or into the air system of the hospital. This is used to prevent cross-contamination by isolating a patient who may spread a sickness through respiratory means. These beds are located within the Emergency Department, Emergency Department Annex, Telemetry Unit, Pediatrics Unit, Operating Room, and the Labor and Delivery Unit. The Skilled Nursing Facility has a potential negative pressure bed capacity of 20.

### Medical Equipment

The Hemodialysis Unit at GMH has a current license for 17 dialysis treatment stations. Treatment is currently only provided for inpatient care. The Inpatient Unit has access to four hemodialysis stations available for acute patients who are admitted or for patients waiting for a room while in the EMD. A portable dialysis machine is also available for patients who are not stable or unable to be moved. Although the Outpatient Unit was equipped with 13 stations to serve chronically ill patients, the capability to provide hemodialysis to outpatients was closed in late 2011. One isolation room is also available. In the event that either unit becomes overloaded, treatment stations may be used from the other units' available stock.

The Radiology Department at GMH performs regular diagnostic studies such as lung, abdomen, pelvis, upper and lower extremities, brain and spine, etc. utilizing x-ray and other equipment. The department also performs CT scans and ultrasound studies. Department staff is currently working to get the mammography, nuclear

medicine, and MRI machines back in operation to provide a better array of important services for patients.

The Special Services Department was formed in 2005 and is led by a group of hospitalists and healthcare professionals including registered nurses, technicians, and technologists. The purpose of the Department is to provide diagnostic procedures such as echocardiogram, electroencephalogram (EEG), electrocardiogram (EKG), cardiac stress tests, and cardiac MIBI, as well as neurology, cardiology, and orthopedic consultations. The Department also operates the "Heart Program", which has been successful in bringing new and improved cardiology services to Guam that ease the difficulties that have previously been associated with traveling off-island for cardiac care.

The Nursery Department recently acquired two state-of-the-art Giraffe OmniBeds. At the time of the site visit, one of them was missing parts and was therefore unusable. These beds are among the most advanced and user-friendly microenvironment units on the market for intensively ill infants.

### Skilled Nursing Unit Facility

GMHA established an off-site Skilled Nursing Unit (SNU) in Barrigada Heights in 1996. The SNU specializes in rehabilitation, long-term care, hospice care, wound care, and training for families once a patient returns home. The primary users of this facility are seniors requiring 24 hour access to care by registered nurses; however, it is also used by patients undergoing rehabilitation after surgery or from injuries, disabilities, or other illnesses. The facility is certified by Medicare. The general population of patients is in the older age range: approximately 10 percent of patients are under 40 years of age, around 40 to 50 percent are between the ages of 40 and 65, and the remaining patients are older than 65. Eighty-five percent of the patients at the SNU have a turnaround rate of two to four weeks; however, some require a longer stay at the facility.



The entrance to the SNU

This facility was initially built to allow for an overall capacity of 60 long-term care beds. Licensed beds are those for which the facility has a license to operate and use for certain types of treatments and patient criteria. There are currently 40 licensed beds (the SNU is certified for 42 beds) at the site that can be used for long-term care of patients transferred from GMH. However, due to limited staffing levels, the maximum number of beds that can be in use at any given time is currently limited to 35 beds. There is an emergency plan of action in place if the need arises where all beds can be used and off-duty staff will be called in. However, this has never been implemented. There are an additional 20 non-licensed beds at the SNU that can be used for some types of temporary patient needs, but not for all procedures or acute care needs.

Most of the rooms at the SNU are double-occupancy. There are two hospice rooms that are single-occupancy. Four negative pressure isolation rooms were installed at the facility in 2011.

## Issues and Challenges

### Guam Memorial Hospital

One of the major problems identified by several of the departments during the February 2012 site visit was a lack of storage space. Some of the departments have to share storage space, while others have to use staff areas (break rooms, offices, etc.) for storage. Some hallways were observed to have boxes piled up as temporary storage. This creates safety concerns and could be against fire or building codes. Under normal circumstances, hallways are required to remain clear, with temporary storage of items up to 30 minutes.



GMH lacks adequate storage space for supplies, which are often stored in hallways or in rooms that are not meant for storage

One of the primary setbacks in patient service is a lack of supplies and proper medical equipment. Several departments, including the surgical ward, pediatric ward, ICU, and ER indicated that they need to procure more medical PCA pumps and IV pumps, because they are currently sharing between departments, with certain departments such as ICU, getting priority.

*The effects of GMH's financial hardships are widespread, impacting staff levels, supplies, and equipment.* Healthcare costs are constantly rising, and in recent years, the costs of providing patient care have exceeded revenues. These revenues include the amount of money that the Government of Guam can afford to subsidize plus the commitment that the Federal Government contributes to pay for those on Guam who cannot afford care (Medicare, etc.) as well as patient payments through private insurance and cash for services. GMH is mandated to provide medical care to both citizens of Guam (Government of Guam law), the CNMI and Nationals of the Federated States of Micronesia (Federal Compact-Impact Agreement), regardless of their ability to pay for services. This gap between services provided and the ability or willingness to pay for such services has negatively impacted GMH's capacity and performance. In some cases, much needed staff and physicians cannot be hired, while in other areas, necessary equipment and supplies cannot be adequately maintained or upgraded. The GMHA 2009 Strategic Plan outlined one of its strategic goals as "Improving the Fiscal Performance of GMHA". The goal suggests that a solution to the financial woes of GMHA has three parts:

1. Improving cash flow;
2. Improving procurement procedures; and
3. Upgrading the MIS system throughout the hospital.

Guam Memorial Hospital has faced many financial hardships over the past several years. As of December 2010, GMHA owed \$22 million for various utilities, doctors, and outside entities, including \$14.5 million to vendors for medications, supplies, services, and equipment needed to keep the hospital running. Some vendors declared they would suspend services until payments were received. This announcement was accompanied by the proclamation by then-Governor Felix Camacho that GMH was in a state of emergency due to financial problems and debts. As a result, the Department of the Interior approved for GMH to use \$1 million of its Compact-Impact funding to cover some of the costs for the short-term. The money was not able to be used to pay existing debts, but was meant to make new orders necessary for continued operations. After it became public that GMHA fell short of money to pay its vendors for medical supplies and medications in 2010, thus running out of some supplies, the Joint Commission began to examine whether the hospital has the ability to adequately meet the needs of patients.

In late January 2011 the Governor of Guam authorized and signed a \$12 million loan for GMHA to pay for medicines, medical supplies, and vendor bills. Although by no means a permanent fix, this loan was meant to help the hospital to continue operating and be able to pay for much needed supplies from vendors.

By late February 2011, GMH had made a total of \$5.2 million in overdue vendor payments, \$3.9 million of which was from the \$12 million loan. The remaining amount was paid from GMH's revenues. Several of the vendors had already placed GMH on credit hold and would not sell them any more supplies until payments were received. As a result of these payments, and the layout of future payment plans and assurance of future payments, GMH was allowed to order new supplies from these vendors to support on-going hospital and patient needs. Not all vendors were paid in full, and additional payments were expected.



*An example of unusable equipment while awaiting replacement parts*

*There has been a decline of physician staff at GMH, resulting in a shortage, in recent years.* The number of GMH's medical staff, primarily physicians, has steadily declined over the past 10 years. This decline in physicians has been credited in part to financial problems at GMH that have resulted in lower salaries and vacant positions that could not be filled due to lack of funding, which resulted in new staff not being hired once someone leaves. As Guam's workforce continues to age and additional medical professional retire, the number of vacancies will expand if this issue is not addressed. The physician shortage is most evident in the areas of orthopedics, neurosurgery, cardiac surgery, and urology.

*The healthcare facilities on Guam, particularly GMH, do not currently have all of the necessary equipment or services to support the full array of needs of the citizens.* There is currently no organ transplant or organ harvesting program on Guam. The unavailability of this life-saving technique could lead to unnecessary loss of life that could have been prevented through organ transplantation. The only means of organ transplantation for Guam residents currently requires a lengthy trip off-island to Hawaii. This service is available by means of a Memorandum of Understanding between GMH and St. Francis Hospital in Honolulu. Travel to Hawaii, which is approximately 3,800 miles away from Guam, substantially increases a patient's cost of care for this service. Additionally, Guam does not have a cardiac unit, and patients seeking major heart surgeries must travel off-island to receive this care.

The availability of certain services on Guam is also hindered by the financial feasibility of obtaining and operating such equipment, including the costs associated with the equipment itself as well as having trained staff to operate and maintain it. Strategic alliances such as the formal relationship between Hawaii's St. Francis Hospital and GMH increase access to care; however, the cost and distance of this particular example still poses constraints.

Although GMH does have certain pieces of medical equipment needed to provide various levels of care, many items are in need of repair or replacement. A list provided by GMH in June 2011 identified several types of medical equipment that were in need of repairs or parts in order to be effective. The following is a list of key equipment items identified as defective and awaiting parts and/or repair.

- 1 magnetic resonance imaging (MRI) machine
- 3 of the 12 total 840-series ventilator systems
- 3 of the 18 total infant warmers
- 5 of the 24 total infant incubators
- 126 of the 160 total infusion pumps
- 3 of the 32 total kidney machines
- 4 of the 104 total vital signs monitors

*The location of GMH makes it difficult to access by certain communities.* Although GMH's location on the northern side of Guam is in the most densely populated area of the island, access to the hospital by residents who live in the southern portion, particularly more remote areas, is often challenging. Some of the residential areas in southern Guam are remote with poor quality roads that are difficult for an ambulance to travel through in a timely manner. Furthermore, during rush hour the major roads connecting southern and northern Guam are congested, increasing the response time of an ambulance from GMH to the southern villages. The DPHSS Southern Region Community Health Center provides some services for residents in the area; however, this facility does not provide acute inpatient care and certain emergency services needed at GMH.

*The Emergency Room (ER) at GMH is often used as the first source of treatment for non-emergency situations.* GMH's ability to provide acute care is constrained by an abundance of patients who seek routine medical care in the ER rather than at a clinic or other provider. Patients with limited to no transportation may opt to seek medical care for non-emergency conditions (such as the flu or sore throat) or choose to call for an ambulance, which takes them to the ER, simply because they have no

means of travelling to a health clinic. Once a patient arrives to the hospital by ambulance, they will be admitted to the ER, regardless of how serious the condition, thus requiring the attention of hospital staff and resources and adding to wait times of patients experiencing health emergencies that truly require immediate attention. Some unnecessary hospital visits are also the result of a patient lacking the knowledge of available resources for treatment of minor ailments, such as the public health centers.

Analysis of data provided from GMH for the fiscal years (FY) 2000 to 2010 identified that there is an average of 29,885 people that visit the ER each fiscal year. Of the average ER visits for the nine years (FY01 data was not available), an average of 4,243 patients were admitted to the hospital for further treatment, while the remaining 25,642 were classified as outpatient visits. This means that ER visits that resulted in outpatient visits account for 85.8% of the total average of ER visits for the nine years. Further breakdown of the data was not available for analysis as to the number of specific types of ER visits to determine how many could actually be classified as "non-emergency". Furthermore, the state of mind of the individual at the time of going to the ER may not be known to determine if they felt they had a justifiable reason for going to the ER, or if they only went because they did not know where else to go for treatment

### **Hospital Beds**

According to the 2009 GMHA Strategic Plan, inpatient service beds are experiencing high occupancy rates. Services such as Intensive Care Unit / Critical Care Unit (ICU/CCU), Neonatal Intensive Care Unit (NICU), and Pediatrics are experiencing 50% and above occupancy rates while Medical/Surgical units are at 80% and above and the Medical/Telemetry Unit, and Intermediate Care Nursery are often near full capacity.

GMH has a significant deficit in the number of acute care hospital beds in relation to the number of people that the hospital serves. As of 2008, the ratio of beds per 1,000 people on Guam was less than half the ratio of hospitals throughout Hawaii, the US, and some of the other islands in the Western Pacific. Furthermore, this ratio only accounts for Guam's resident population, and does not take into account persons who are sent to the hospital from off-island. Guam's population is continuing to grow, and will experience a spike during the military buildup as well as a long-term increase over planned organic growth. This bed capacity deficiency must be addressed in order to support both current and future healthcare needs and provide quality healthcare for residents and visitors alike. Using the 2010 population

estimates for Guam, a total of 361 (203 additional) acute care beds would be needed to reach a ratio of 2.0 beds for every 1,000 persons, and 488 (330 additional) beds would be needed to reach the US average.

### **Intensive Care Unit**

During the February 2012 site visit, staff in the ICU identified the following problems with the space and equipment in their department:

- The adjustability function on many of the beds is broken.
- Doctors have no way to transfer prescriptions electronically to a pharmacy because of inadequate electronic equipment and connectivity.
- Currently there are nine beds in ICU, and sometimes patients are sent to other departments when there is overflow. There is an expansion project underway that will expand the ICU to 15 beds.
- There is a need for new patient monitors.
- IV pumps are often shared with other departments, and the ICU (as well as other departments) needs their own sufficient supply.

### **Inpatient Hemodialysis Unit**

During the February 2012 site visit, staff in the Inpatient Hemodialysis Unit identified the following problem with the space and equipment in their department:

- The dialysis machines are more than 10 years' old.
- There is a need for 17 new machines.

### **Labor and Delivery Unit**



*The beds in the Labor and Delivery Unit are not adequately sized*

During the February 2012 site visit, staff in the Labor and Delivery Unit identified several problems with the space and equipment in their department:

- There is only one birthing room. If there was more space in the unit, it could be converted to more birthing rooms.
- The current delivery tables are old steel models, which are uncomfortable. In addition, the footholds often break because of the small size of the tables. There is a desire for bigger, wider, and newer delivery tables to accommodate modern circumstances and needs.

### **Nursery Department**

During the February 2012 site visit, staff in the Nursery Department identified several problems with the space and equipment in their department:

- Some of the incubators are more than 15 years old and could be replaced.
- There is a need for new monitors that have modern capabilities as well as additional monitors. Other units sometimes borrow monitors from the Nursery Department.
- A new Giraffe OmniBed was acquired by the Nursery, but it is missing parts, making it unusable.

### **Obstetrics Ward**

During the February 2012 site visit, staff in the Obstetrics (OB) Ward identified several problems with the space and equipment in their department:

- The medication room and storage areas are not big enough. Supplies are often stored in the nurse's station, which could be a safety concern.
- An electronic tagging system is needed for babies.
- The individual rooms do not have their own AC control.
- The OB Ward sometimes has to take overflow patients from the Surgery Ward.
- There is a desire for an enclosed glass nurse's station for privacy and safety reasons.
- There is a lack of meeting space for doctors and patients, forcing meetings to take place in patient rooms.

### **Operating Room**

During the February 2012 site visit, staff in the Operating Room identified several problems with the space and equipment in their department:

- The patient consultation area is too small and only has four seats. The office is also too small.
- The changing rooms are not adequately sized and cannot accommodate a wheel chair. Patients in wheel chairs must circumnavigate the office and pass through the waiting room after having changed into medical gowns, which reduces their privacy.
- Due to the lack of space and number of patients, assessments can sometimes take 45 minutes, causing delays in seeing patients. Due to the space restraints, and only having one computer for assessments, only one patient can be assessed at a time.
- There is no air circulation in the patient assessment area, and it gets hot and uncomfortable.

- The washroom / sterilization area has many issues, including:
  - there is only one sink, there is no floor drain;
  - there is no preparation table, the floor is deteriorated from liquid not draining properly; and
  - sterile supplies are in the adjacent room and there is no airtight separation to keep contaminants out.
- There are two sterilizers that have been there since at least 1985, and are often broken down, temperature monitors on the refrigeration units do not work, so temperatures must be charted manually. If the temperatures get too high when nobody is there to monitor, supplies inside can be damaged or ruined.

### **Pharmacy**

During the February 2012 site visit, staff in the Pharmacy identified the following problem with the space and equipment in their department:

- There is not enough storage space in the pharmacy warehouse. Some items are stored in the pharmacy office because there is no space in the warehouse. The pharmacy generally tries to keep a four-month supply of common medications because it often takes a long time for medications to be delivered, and they do not want to run out. Delivery time of medications is so lengthy that they are at times near or past their expiration date by the time they arrive to GMH. The current pharmacy warehouse occupies approximately 2,000 square feet, and staff indicated that they need an additional 1,000 square feet. Additionally, the storage space for "lock and key" items is too small. The pharmacy has trouble stocking the amounts of items that it would like to because of space constraints, which could impact patient service.
- All medications that GMH purchases must come from the US, as per FDA regulations. These medications are more expensive and take longer to arrive than the same medications from places such as Asia, but these cannot be purchased because they are not FDA-certified.
- Some vendors have cut off medication and supply deliveries due to lack of payment from GMH.

- Pharmacy staff recently took over operation of the materials warehouse, which has inflicted further strain on staff schedules and availability to fill orders.
- Joint Commission accreditation requires that the pharmacy be operational 24 hours a day. Prior to regaining accreditation, the GMH pharmacy was open only 18 hours per day. This increase in operations was not supplemented with new staff to handle the increase in hours.
- There is no video surveillance in the pharmacy warehouse.
- The pharmacy facility has not been updated since it was built.
- There is no electronic medication system, and all items that are taken out of the warehouse must be manually entered into the system as being removed or used.

### **Radiology**

During the February 2012 site visit, Radiology staff identified several problems with the space and equipment in their department:

- The MRI equipment has not been functional since 2010. GMH does not want to reinstate MRI capabilities because the entire system would need to be replaced, which would be costly.
- Nuclear medicine has not been active for a long time due to a variety of reasons: the inability to get the necessary isotopes, the need for additional funding, and a lack of qualified staff. The department would like to get this function back up and running.
- Currently, GMH has to send patient referrals to Guam Radiology for MRI and nuclear medicine services.
- There is currently no mammogram capabilities because the film processor was too old to be adequately used anymore and no replacement has been acquired.
- A new CT scanner was acquired two years ago (which scans at 64 slices), and the only other one is more than 20 years old (and scans at only one slice). If the new CT scanner goes down, then the department must rely on the old one. At the time of the site visit, the new scanner was in need of parts to be ordered for proper

functionality. The department would like to get at least another 32 slice scanner.

- There are two x-ray machines, one of which is 12 years old, and the other is between six to eight years old. The normal life expectancy of these machines is eight years. New state of the art equipment is needed.
- The ultrasound machine was acquired around the year 2005 and has experienced a lot of wear and tear. The department would like to acquire a new one that is also more portable.

### **Recovery Ward**

During the February 2012 site visit, staff in the Recovery Ward identified several problems with the space and equipment in their department:

- The Recovery Ward only has one isolation room.
- Sometimes overflow patients from ICU are sent to the Recovery Ward because of lack of space.
- There is a need for a locking medicine cabinet for security reasons.
- Oftentimes medications expire and must be thrown out, resulting in a loss of money and impact to medication supplies.

### **Surgical Ward**

During the February 2012 site visit, staff in the Surgical Ward identified several problems with the space and equipment in their department:

- The nurse call light system is outdated and does not always work properly.
- There are only two isolation rooms and a need for three or four more. Some of the existing rooms could be converted to isolation rooms.
- There are two separate nursing stations, causing inefficient operations. Currently, patient calls only go to the main station, and nurses have to move back and forth between stations to manage calls. These two stations should be combined into one that is able to view all patients. In addition, the nursing station should be enclosed for privacy and safety.
- Space is a big issue. The department needs a bigger room for staff meetings, care conferences with patients and families, etc. Doctors do not have their own private space, and they have to conduct meetings in the endorsement room or staff break room.

- Patient rooms are also small. Some of them are separated by a curtain rather than a solid wall.



One of the nurses stations in the Surgical Ward



Patient rooms are small in the Surgical Ward

### Telemetry Unit

During the February 2012 site visit, staff in the Telemetry Unit identified several problems with the space and equipment in their department:

- They are in need of a portable oxygen concentrator. Currently, they borrow this from DPHSS.
- There is only one isolation room. The Telemetry Unit is need of one more isolation room.
- The ice machine has been broken for months and ice must be transported from other departments for use in patient and procedure needs.

- There is a need for portable computers with an Electronic Medical Records system that nurses can take with them to patients.
- Sometimes overflow patients from the ER are taken to the Telemetry Unit beds.

### Warehouse

GMH also has a warehouse for the storage of bulk items and supplies/ During the February 2012 site visit, staff in the Warehouse identified several problems with the space and equipment in the warehouse facility:

- The warehouse does not have enough space. The general materials that are stored inside the warehouse are IV supplies and bulky items. During the site visit, a large amount of off-island overstock was being stored outside, exposed to the elements.
- The warehouse is kept at room temperature, and some materials or supplies need to be kept at cooler temperatures.
- An expansion to the warehouse was built on the third floor, but it has no direct access to the inside of the hospital.



The warehouse is too crowded



*Excess warehouse overstock is sometimes stored outside*

**Skilled Nursing Unit Facility**

An entire wing of the SNU is currently not able to be utilized for its intended purpose of providing medical care due to lack of staffing and the limited number of certified beds that can be occupied at one time. This wing is currently used as storage. There is a critical shortage in nursing staff at the SNU, partly because of the difficulty in hiring and retaining qualified staff. There is currently not a physician on staff at the SNU. The current requirement is that a physician, from GMH or somewhere else, only visits his or her patient once a month. In addition to medical personnel, a larger maintenance crew is also needed. Currently, the maintenance team responsible for upkeep of the entire facility is only three people.



*A good portion of the SNU is used for storage because there is not enough staff to be able to operate the third wing*

There are no programs on Guam for patients with psychiatric and medical problems. During the time of the site visit in February 2012, there was a patient that had been at the SNU since 2004. This patient was in need to mental health services; however, since there are no facilities to house him, he remained at the SNU. SNU staff is generally not certified to manage psychiatric patients, which requires social workers or other personnel to come from outside the SNU to assist. The current setup does not provide separation between psychiatric patients and other patients. One suggestion from staff was that DMHSA could operate a medical ward in the unused wing of the facility to separate patients with different needs.

Furthermore, the SNU cannot discharge homeless patients onto the streets, so it becomes somewhat of a “safe haven” for those that cannot be discharged. During the February 2012 site visit, eight of the 30 patients at the SNU were homeless if released from the facility.

During staff interviews, it was expressed that the SNU is in need of a larger rehabilitation gym. The current area is small and patients must sometimes wait when it is in use. The overall location of the SNU is sufficient as a standalone facility; however, its distance from GMH and other medical facilities poses constraints on the possibility of sharing staff (such as visiting physicians) and can result in delays to patients receiving certain forms of treatment. Sometimes patients have to be transported to GMH or another facility for treatment or procedures, such as dialysis. Another suggestion that was identified during the interviews was to consider use of the unutilized SNU wing as an inpatient dialysis facility that would be privately operated.



*The rehabilitation room at the SNU is not adequately sized*

## Department of Public Health and Social Services

The Department of Public Health and Social Services (DPHSS) is the government agency responsible for monitoring and maintaining health and social service concerns, issues, and related public infrastructure on Guam.

DPHSS is one of the major public providers of healthcare and social services to the island's residents. Many of DPHSS's functions operate out of the main facility in Mangilao; however, there are several functions located separately from the main facility, such as the Division of Senior Citizens that is located near University of Guam. This dispersion of facilities could be problematic for individuals who need to visit multiple offices and may have to go to multiple locations to do so. DPHSS provides direct care services from its main facility, two Community Health Centers (CHCs), and a number of senior citizen care facilities.

The staff at DPHSS facilities that were interviewed during the October 2011 and February 2012 site visits and walkthroughs were:

- James Gillan, DPHSS Director
- Linda Unpingco-DeNorcey, M.P.H., Executive Director - Guam Community Health Center

### *Community Health Centers*

The Northern and Southern Region CHCs provide primary healthcare, acute outpatient care, and preventive services on Guam. The CHCs provide a full range of primary care services through their staff of family practitioners, pediatricians, internists, nurse practitioners, and other health professionals. The CHCs are Federally Qualified Health Centers and are multi-specialty primary care clinics that provide government-run facilities supplemental to Guam Memorial Hospital. A Federally Qualified Health Center designation means that these facilities accept Medicare patients for a variety of services.

The Guam CHCs' target populations include those who are low income, uninsured, and medically underserved, including:

- children below the age of 11;
- adolescents (including those confined in a correctional facility);

- females of childbearing age with health risk factors;
- pregnant women;
- the elderly;
- homeless and those living in emergency or transitional shelters; and
- citizens of the Commonwealth of the Northern Mariana Islands (CNMI), Federated States of Micronesia (FSM), the Marshall Islands, and other immigrants.

The CHC's programs include administering welfare benefits and program assistance to over 8,000 households. These programs and assistance include: administering and monitoring Medically Indigent Program (MIP) and Medicaid; licensing of child care facilities and foster care homes; child protective services; administration of health and sanitary certificates; provision of immunization shots; issuance of birth and death certificates and marriage licenses; reporting of communicable diseases; provision of services for women, infants, and children; and administration of the Older Americans Act.

There are three primary types of services provided at the centers, as listed below along with the types of activities they support.

- **Primary Care and Preventive Services:** Prenatal and Postpartum Care, Women's Health (OB/GYN Care), Well Baby Care, Child Health, Immunizations, Adolescent Health, Adult Care, Minor Surgery and Wound Repair, TB Test, Directly Observed TB Therapy, Early Periodic Screening and Diagnostic Testing for Children (EPSDT), Family Planning Services, Cancer Screening, Communicable Disease Screening and Treatment (HIV, TB, STD, etc.), Chronic Disease Care (Hypertension, Diabetes, Heart Disease, etc.).
- **Support Services:** Diagnostic Laboratory Services, Pharmacy Services, Chest X-Ray (SRCHC only), Vision Screening, Community Outreach Services, Health Education Services, Nutrition Health Services, Case Management, Eligibility Assistance, Home Visiting Services, Translation Services.

- **Social Services:** Medical Social Services; Nutrition Assistance Programs (i.e., SNAP, TANF); Medically Indigent Program; Medicaid Program; Women, Infant, and Children (WIC) Program.

### *Division of Senior Citizens*

The Division of Senior Citizens (DSC) offers a variety of support services for Guam's senior citizens (persons aged 60 and above). The DSC conducts an in-home services program for senior citizens who are without a caretaker and at risk of being institutionalized due to limitations on their ability to conduct daily life functions independently. These services are also available to those older individuals who do have a caretaker and require extra assistance. Activities are planned, developed, coordinated, implemented and administered as related to the purposes of the Older Americans Act. The DSC also includes the Bureau of Adult Protective Services, which operates Emergency Receiving Home services for the elderly who require emergency shelter care. The Emergency Receiving Home only provides temporary shelter for those in need. DSC is located in Mangilao near University of Guam, separately from the DPHSS main facility.

DSC operates two adult day care centers where seniors can visit and participate in social gatherings and events during the day. One facility that serves the general senior citizen population is located in Barrigada Heights. The facility in Dededo serves a target population of senior citizens with dementia. These facilities are well-situated relative to their primary population served; however, their location relative to other facilities does not allow for the provision of services in the most efficient manner. DSC also operates 12 senior center locations throughout the island. Of these, five are in the southern half of the island and seven are in the northern half. Each of the adult day care centers and senior centers are staffed by contract personnel, and are not public employees. One of the primary challenges that the DSC contends with when trying to attract more senior citizens is the lack of public transit and constrained accessibility for those who do not have personal transportation.

### *Division of Environmental Health*

The Division of Environmental Health (DEH) is the branch of DPHSS responsible for ensuring public and consumer health and protection through preventive measures against unsanitary conditions. This is done through education, advocacy, and enforcement of regulations. DEH's major functions include: sanitation inspections of regulated facilities (four unannounced inspections per year required by law), plans and specifications of regulated facilities, processing center operations (permits, registrations), regulation of consumer commodities, and vector and animal control. DEH is located at the main DPHSS building in Mangilao.

### *Division of Public Health*

The Division of Public Health (DPH) is DPHSS's largest division and its mission is to ensure the provision of direct and indirect healthcare services for individuals, families, high risk groups, and the community at the three public health facilities, in addition to the schools, home settings, and other community locations and in accordance with legal mandates and identified collective health needs of the population in an effective and efficient manner. DPH and its component offices are located at the DPHSS main facility in Mangilao. DPH includes the following offices and programs:

- Chief Public Health Office
- Health Professional Licensing Office
- Dental Health Section
- Office of Vital Statistics
- Office of Planning and Evaluation
- Office of Epidemiology and Research and Cancer Registry
- Emergency Medical Services
- Emergency Medical Services for Children
- Guam Real Choice Program
- Bureau of Communicable Disease Control
- Foreign Quarantine and Enteric Disease Control Program
- Tuberculosis and Hansen's Disease Control Program
- STD / HIV Prevention Program
- Immunization Program
- Laboratory
- Public Health Preparedness and Response to Bioterrorism
- Bureau of Nutrition Services

- Breast and Cervical Cancer Early Detection Program
- Behavioral Risk Factor Survey System
- Comprehensive Cancer Control Program
- System-Based Diabetes Prevention and Control Program
- Health Education Program
- Medical Records Section
- Medical Social Services
- Pharmacy Services
- Sexual Violence Prevention and Education Program
- State-Based Tobacco Prevention and Control Program
- Guam Office of Minority Health
- Bureau of Primary Care Services

### *Division of Public Welfare*

The Division of Public Welfare (DPW) is comprised of four Bureaus and the Chief Public Welfare Office, which is responsible for the administration and overall operations of the Division's federally and locally funded programs. The functions of the Chief Public Welfare Office include fiscal management and administrative support. The overall mission of the Division is to promote positive social conditions that contribute toward the attainment of the highest health and social well-being for the economically and socially disadvantaged populations on Guam. This is accomplished by developing an efficient and effective delivery system of services to eligible clients on the island; by determining eligibility of applicants; by administering payments and various social services to remove social barriers that prevent a person from obtaining/maintaining the basic necessities of life (including safe and decent housing, medical care, nutritious foods and employment status). DPW's primary location is at the main DPHSS facility in Mangilao; however, some of its associated bureaus are located in other parts of Guam. Notably, the Bureau of Social Security Administration is in Hagatna.

## *Existing Conditions*

### Central Clinic



*DPHSS Central Public Health Clinic*

The Central Public Health Clinic is located at 123 Chalan Kareta in Mangilao. Its hours of operations are from 8:00 am to 5:00 pm Monday through Friday. It is closed on the weekends. It is part of the DPHSS main facility, which also includes administrative offices and other assets for DPHSS. The healthcare services located at the main facility include vital statistics, dental, STD / HIV testing and prevention, communicable diseases lab, Maternal Child Health (MCH) program, family planning, and immunizations. There are several other services that are located off-site from the main facility, including Senior Citizen facilities, MIP and Medicare administrative offices, the Health Professional Licensing Office, immunizations, WIC, and SNAP.

The location of the DPHSS main facility is adequate for the population served; however, the facility itself is in poor condition and not adequately sized for all of its functions and to serve its population base. The building is approximately 75,200 square feet in size. The physical plant that serves the existing building is in poor condition. The generator does not function at optimal efficiency when placed into service to provide the redundant energy source when the primary electrical supply is cut off due to system outages or severe weather conditions. No water storage is provided on the site and fire suppression is marginalized. Another concern expressed by DPHSS staff was the desire for more conference space and facilities for employees. Break rooms often consist of staff offices, and employees must utilize small spaces that can become crowded during break times.

The main facility still inputs medical records and information in by hand. There is no automated system set up on-site, which affects the timeliness of searching for files. An automated system is desired by DPHSS staff for ease and efficiency of inputting and accessing information.

The DPHSS main facility operates a dental program, which is open from 8:00 am to 5:00 pm on Monday through Friday. The dental program serves an average of 30 patients per day. The patient waiting area has 21 seats, which was identified to be inadequate to support current patient demands. There is one x-ray machine, two medical supply storage areas, and nine working dental operation stations. The number of dental operation stations is inadequate to support current patient demands. Just over 91% of the patients served at the dental program are younger than age 16. Current staffing at the dental program consists of two DDS medical professionals, and six dental hygienists.

Staff at DPHSS suggested that the facility should discontinue the dental program. It was opened in 1973 and still has the original equipment from that time, which is outdated. The space that it occupies is fairly large and could be converted to employee space, a conference room, or some other type of gathering area for employees to utilize during breaks, since there is a lack of employee space on-site.

The Bureau of Family Health and Nursing Services (BFHNS) is located at the DPHSS main facility. Their hours of operation are from 8:00 am to 5:00 pm, Monday through Friday. They treat an average of 110 patients per day for both in- and out-patient services and home visits. The types of service offered includes tuberculosis control and clinic walk-ins, family planning clinic, MCH women's health clinic, MCH child health clinic, immunization outreach and walk-in clinic, STD clinic and home visits, and hearing screenings. The facility includes five exam / treatment rooms, two physician offices, 20 seats in the patient waiting area, two medical supply storage rooms, one pharmacy, and an x-ray room, which is currently not in service, but has a high utilization rate when operational. Of these assets, only the number of physician offices was identified as adequate to serve current patient loads. The x-ray room needs a new shielded wall to be installed. When it is operational, the x-ray room is adequate to support patient demands.

The BFHNS is staffed by one full-time and one part-time medical doctor, nine full-time and one part-time medical professionals, eight full-time medical support staff, three program coordinators, and one full-time administrative support staff. Funding for more staff is needed to support an increased demand in services.

### **Diagnostics Laboratory**

DPH operates a diagnostic laboratory used for a range of testing for communicable diseases, MCH Program services, Family Planning Program services, and serves as a reference laboratory for the civilian and military clinics and hospital. Currently the laboratory is located at the DPHSS main building and is classified as a Biosafety Level 1 lab, meaning that it is capable of only testing for the most basic types of communicable disease pathogens. The Central Public Health Laboratory has been operating since the 1970s. It operates with 15 staff and administers testing in the areas of clinical chemistry, hematology, immunohematology, infectious disease serology, mycobacteriology culture and anti-mycobacteriology susceptibility testing, and outbreak investigations. The lab has experienced a loss of several critical staff positions, which does not allow it to conduct microbiology and food borne pathogen investigations. The lab is also a Clinical Laboratory Improvement and Amendment (CLIA) regulated facility, providing capacity as a reference laboratory to other US Affiliated Pacific Islands (USAPI) Laboratories. There is a strong need for improved and wider testing capabilities through acquisition of a Level 2 lab.

The diagnostic laboratory operates between the hours of 8:00 am to 5:00 pm on Monday through Friday. The average number of patients seen per day is approximately 13, and has a total of seven seats in the patient waiting area. The lab tests for communicable diseases such as HIV, Hepatitis B, syphilis, influenza, and measles. Approximately 75% of the patient load at the lab is female. The lab itself is 89 feet wide by 54 feet long. It has two polymerase chain reaction (PCR) systems, which are used to help identify and diagnose certain diseases. The utilization rate of these systems is low, and they currently cover the patient demand. There is also one Enzyme Immunoassay (EIA) system that is used at a medium utilization rate and meets the current patient demand. The lab is staffed by six full-time allied health professionals, including lab technicians, and one administrative support staff. There is an identified need of two additional allied health professional staff in order to meet current patient demand.

### **Northern Regional Community Health Center**



*Entrance to the Northern Regional Community Health Center*

The Northern Regional Community Health Center (NRCHC) is located at 520 W Santa Monica Drive in Dededo. Its hours of operation are from 7:30 am to 6:00 pm on Monday through Thursday and from 7:30 am to 1:30 pm on Friday and Saturday. It is closed on Sunday. The facility consists of approximately 46,300 square feet of space, and includes 14 exam / treatment rooms, one physician office, three medical supply storage areas, a pharmacy, a laboratory, and 120 seats in patient waiting areas. The numbers of patient seats, as well as the laboratory, were both identified to be inadequate to support current patient demands.

The location of the NRCHC within the most populous region of Guam provides important and needed services for the residents in this area. The overall facility and services offered there are adequate for the current needs of the patients; however, there are some portions of the facility that have concerns or issues, which are discussed later in this section.

The NRCHC sees an average of 120 patients per day, and offers services in diagnostic / screening (primary care), laboratory, procedures / treatments, pediatrics, mental health, and pharmacy. The largest number of patients is served by the pharmacy, at an estimated 115 people per day, followed by diagnostic / screening services at an estimated 100 people per day. An estimated 40 patients are served by the laboratory per day, an estimated 30 through pediatrics, an estimated 25 receive procedures / treatment, and an estimated three patients per day are served by mental health services.

The current staffing at the NRCHC is identified in Table 2-4. As is shown in the table, none of the categories for staff type currently meets the demand for patients to be able to efficiently serve all those in need.

In terms of medical staff, the center needs almost double the numbers of qualified staff in each area to be on par with patient demands.

### **Southern Regional Community Health Center**



*Southern Regional Community Health Center*

The Southern Regional Community Health Center (SRCHC) is located at 162 Apman Drive in Inarajan. It is open from 8:00 am to 5:00 pm on Monday through Thursday and 8:00 am to 12:00 pm on Friday. It is closed on Saturday and Sunday. The facility is 34,627 square feet in size and includes 16 exam / treatment rooms, four medical supply storage rooms, three patient waiting areas, one nurse station, one pharmacy, and one physician office. All of these spaces were identified to be adequate to support current patient levels at the facility.

The SRCHC serves an average of 42 patients per day, and offers services in diagnostic / screening (primary care), laboratory, pediatrics, mental health, and procedures / treatment. Diagnostic / screening is the most predominant service utilized, with an estimated 52 screenings occurring per day, followed by laboratory (20 tests per day), pediatrics (10-15 visits per day), mental health (4-5 visits per day), and procedures / treatment (three per day).

The current staffing at the SRCHC is identified in Table 2-5. As is shown in the table, none of the categories for staff type current meets the demand for patients to be able to efficiently serve all those in need. In most of the staffing categories, at least double the current number of personnel is needed to support patient demands.

The SRCHC is a new facility that was still being set up in many sections during the site visit and walkthrough in February 2012. This facility is much more advanced and modern than the other two DPHSS clinic facilities and is a good resource for the people of Guam. It has adequate space in areas for staff and patients. It is also in the process of initiating electronic records keeping.



The main waiting room at the SRCHC

Table 2-4. Current Staffing at NRCHC

Staff Type	Full-Time (Number)	Part-Time (Number)	Volunteer (Number)	Meets Patient Demand? (Y/N)	Additional Staff Needed? (Number)
Medical Professional (MD, DO, DDS, etc.)	5	6	2	N	6 (2 Pediatricians, 2 Family Practitioners, 1 OB/GYN or Certified Nurse Midwife, and 1 Nurse Practitioner)
Medical Professional (RN, etc.)	4	1	0	N	7 (3 RNs, 4 LPNs)
Medical Support (CNA, MA, LVN)	3	0	0	N	4 (CNAs)
Allied Health Professional (RT, Dental Hygienist, Lab Technician, Social Services)	8	0	1	N	8 (1 Lab technician, 1 Pharmacist, 3 pharmacy technicians, 1 Social Worker, 1 Nutritionist, 1 Translator)
Administrative / Support	23	2	0	N	10 (5 Medical Record Clerks, 1 cashier, 1 Administrative Assistant, 3 clerks)
Other (Management Information System Staff)	0	0	0	N	2
Pharmacy	0.6FTE pharmacist 1.5 FTE pharmacy Technicians)	0	1	N	3 (1 pharmacist and 2 pharmacy technicians)

Table 2-5. Current Staffing at SRCHC

Staff Type	Full-Time (Number)	Part-Time (Number)	Volunteer (Number)	Meets Patient Demand?	Additional Staff Needed? (Number)
Medical Professional (MD, DO, DDS, etc.)	3	5	0	N	3MDs (1 Pediatrician, 1 Internist, , 1 and Family Practitioner 2 Mid-level Providers (1 Certified Nurse Midwife, 1 Nurse Practitioner)
Medical Professional (RN, LPN)	3	1	0	N	4 (2 RNs, 2 LPNs)
Medical Support (CNA, MA, LVN)	2	0	0	N	3 CNAs
Allied Health Professional (RT, Dental Hygienist, Lab Technician, Social Services, Nutritionist)	1	0	0	N	3 (1Lab Technician, 1 Social Worker, and 1 Nutritionist)
Administrative / Support	6	0	0	N	6 (2 Medical Record Clerks, 1 Cashier, 1 Administrative Assistant, and 2 clerks for the nursing unit)
Other (Pharmacy Staff)	0.4 FTE pharmacist 1.5 FTE pharmacy Technicians	0	0	N	3 (1 Pharmacist and 2 pharmacy technicians)
Management Information System (IT) staff	0	0	0	N	1

## Issues and Challenges

### Central Clinic

The main DPHSS facility was built in 1968 and has become outdated and overcrowded for the amount of activities and staff that operate there. Several of the offices for various divisions operate out of trailers located behind the Central Clinic. Approximately 35% of DPHSS offices are located in disbursed facilities away from the main facility, including the Bureau of Management Support (in Mangilao), Division of Senior Citizens (in Mangilao), Bureau of Social Services Administration (in Hagatna), Emergency Medical Services (in Mangilao), and Health Professional Licensing Office (in Mangilao). Storage space is also limited at the facility, resulting in hallways and offices being used as storage.



An example of some of the poor conditions at the Central Public Health Facility



*These containers were observed within a staff office area*



*Storage in the hallway is a fire hazard*

The clinic space at the Central Clinic is not large enough to support the population that it serves. During peak times on Mondays, Wednesdays, and Fridays, the waiting areas are often observed to be at capacity with waiting customers. Additionally, the laboratory facility is not adequate to support the needs of the island. It needs to be upgraded to at least a Level 2 Lab. Currently, tuberculosis specimens are sent off-island for identification, which adds a significant amount of time to

the diagnosis and treatment period of patients. This is of significant concern given the high and steadily increasing tuberculosis rates experienced by the Guam population over recent years. Additionally, lab staff has expressed issues with a lack of adequate funding needed to purchase supplies, reagents, and new equipment and parts to replace damaged and outdated equipment. Lack of funding also impacts preventive maintenance and sustainment of laboratory quality management systems (i.e. external proficiency testing and quality controls) by not being able to purchase parts or supplies to help with upkeep.

The ability to test and confirm results at the laboratory in a short timeframe is imperative to containing and treating contagious diseases (i.e. tuberculosis, Dengue Fever, SARS, and Influenza) from spreading amongst and between civilian, military, transient worker, and tourist populations. As Guam is a central hub for human movement between the Far East and United States, it is critical that a high quality of health is maintained within Guam Villages, military installations, and hotels serving the island as well as travelers destined for other countries, Hawaii, and/or the continental United States. The existing laboratory is antiquated and does not have the capability to analyze all of the samples they test. Many must be sent either to the Centers of Disease Control facility located in Hawaii or to the San Diego Medical Research Facility. Such an effort requires an eight or fourteen, respectively, hour flight from Guam, extending the timing for lab results to a minimum 12 hours. Such a distance inhibits a timely response to determine test results and implement measures to maintain a healthy population of residents, visitors, and workers on Guam.

The dental program currently has no administrative support staff. Dental services are free to children under 17 years old who meet income guidelines and do not have dental insurance. Patients who are covered by Medicaid, MIP, and other public assistance programs are also eligible for services. Seniors aged 55 years and older are also eligible for emergency services in the clinic. The program is unable to meet the demand for dental services. A majority of people cannot afford dental insurance and are not eligible for Medicaid thus has no other treatment options than utilizing public dental services.

The dental operation stations are over 30 years old. They are slowly breaking down. Parts are no longer available or are very expensive to obtain. The dental handpieces are leaking due to wear. The dental clinic has not been able to see patients except for referrals and limited

extractions because the dental compressor broke down in November 2011. Without the compressor, the suction system is inoperable. The procurement process is very slow. Staff is still waiting for a company to connect the new compressor. Problems are further exacerbated by not having funding to buy supplies. Most of the budget is used to pay for salaries.



*The dental clinic is old, outdated, crowded, and occupies a lot of space*

The number of immunizations administered at the Central Clinic is generally less than 30 per day, which is a low rate. This sometimes can cause children not to be allowed to attend school if they do not have the proper immunizations. It was suggested by DPHSS staff that some services, including immunizations, family planning, and MCH, could be outsourced to private providers in order to be able to serve a large array of customers.

Procurement of materials is a major problem for DPHSS. Since Guam is a US territory, public health facilities must purchase FDA approved medications, which are generally more expensive than the same medicines from places such as Asia. The ability to purchase items from Asia would both save time and money, but this can't be done because of the FDA-approval factor. In terms of equipment, GovGuam often purchases equipment based on price and not quality. Purchasing is done by other agencies in GovGuam that do not have the knowledge of DPHSS to know what equipment or materials are worth buying, as opposed to buying at a cheaper rate. This can cause problems down the road with faulty equipment, which then takes additional time and money to get replacement parts. For example, a new digital x-ray was recently installed at DPHSS, but the proper equipment was not purchased to be able to send the images digitally.

For the BFHNS, the clinic area is too small to accommodate more than 50 patients and staff. The area needs an upgrade to add sinks to all examination rooms and is in need of new medical equipment and supplies. The waiting room is too small for all five clinics to operate simultaneously. There is a need for more up-to-date medical equipment and medical supplies both for clinics and home visiting. Funding is also needed to support night differential for services required after 5:00 pm.

The whole clinic area needs to be upgraded with new equipment (EKG machine, Exam Tables, Ultrasound machine, Cardiac monitors, IV pumps, Crash cart and medications, respiratory care equipment, and Oxygen lines and tanks). The staff also needs training on Acute Care, IV insertion, triage nursing, and trauma nursing. More space for treatment areas and waiting rooms is needed. The clinic experiences problems with the availability of hot water, which needs to be available at all times per health code regulations.

The clinic needs three additional medical doctors, 10 additional Community Health Nurses (RNs), three License Practical Nurses, five more Certified Nurse Assistants, two Respiratory Therapists, three social workers, five administrative / support staff, and two program coordinators. Exploring ways to use medical personnel, such as Physician Assistants, Nurse Practitioners (NPs), Registered Nurses (RNs), and Licensed Practical Nurses (LPNs), in more efficient roles would help balance the workload among personnel properly suited for the tasks. This group of personnel is not utilized efficiently. Staff shortages often mean that medically qualified personnel must perform mundane tasks that do not utilize their skills, when other staff could perform these tasks so that the medical staff could operate more efficiently. The duties and responsibilities of NPs and RNs at Central Public Health should be reassessed with priority being given to providing clinical care rather than supervision / administration (DPHSS Subgroup Task Force, Dec. 2010).

### **Northern Regional Community Health Center**

Two of the major issues that affect service at NRCHC are lack of funding and being understaffed. A shortage in providers and support staff leads to issues such as long wait time for patients to be seen and limited availability to accept walk-in patients. A primary factor in the shortage of staff is the recruitment and procurement process. These processes are too lengthy and constrain the ability of DPHSS to hire new personnel. Contractual agreements between health professionals can take

months to be reviewed and signed by the Bureau of Budget and Management (BBMR), the Attorney General, and the Governor before they can be put in place. BBMR reserves funding so appropriation of local funds are not released in a timely manner, thus hampering CHC operations (i.e., recruit additional personnel, procure supplies, equipment, and contractual services). Additionally, it is difficult to recruit and retain providers, nurses, and pharmacists due to salaries being well below the national rate. Recruitment would be enhanced if more competitive salaries were offered. In terms of funding and procurement, necessary medical, laboratory and pharmacy supplies oftentimes do not arrive in a timely manner, causing shortages in supplies and ability to provide certain services. The shortage of medical, laboratory, and pharmacy supplies severely hampers the delivery of medical and ancillary services (e.g., shortage of lab supplies delays diagnostic testing, thus preventing physicians from diagnosing and evaluating patients' medical condition).

There is a limited number of OB/GYN providers and Certified Nurse Midwives so many patients in their first trimester of pregnancy have a difficult time seeing a provider in a timely manner. Additionally, those with "high-risk" pregnancy may not receive adequate prenatal care services resulting in poor pregnancy outcomes.

The pharmacy does not have enough pharmacists to provide adequate pharmacy services, and the pharmacy window is often crowded with patients, creating both a fire hazard and a lack of patient privacy. Other physical facility issues include insufficient janitorial staff to maintain the cleanliness of the building, the lab drawing station is not wide enough to accommodate more patients, and a need to expand the counseling room and pharmacy technician room.

Due to the low number of private providers on-island that accept Medicaid and MIP, the DPHSS health centers cater to an overwhelming number of patients that have nowhere else to go for medical care or treatment. More than 75% of the patients that are served at the NRCHC pay either through Medicaid or MIP. MIP and Medicaid cards are not mailed on time for patients to receive it and present it to the CHC staff during the patient visit. MIP and Medicaid insurance cards are needed in order for the CHCs to promptly bill MIP and Medicaid and to expedite billing and payment posting. In addition, there are very limited referral services for specialty care (i.e., dental health services, ophthalmology, orthopedics, and cardiology).



*Storage is also a major concern at the NRCHC, as there is not enough. Storage in inappropriate areas causes fire hazards and safety concerns.*

### **Southern Regional Community Health Center**

As is the case at other DPHSS facilities, the SRCHC has a severe shortage of physicians, mid-level providers, nurses, and support staff, resulting from difficulties in recruiting and retaining important qualified medical staff. Some of the impacts that this has on patients include: limited appointment slots available to get all patients seen in a timely manner (some have to wait more than a month to schedule an appointment), only a limited number of walk-in patients can be seen on a daily basis, and appointment wait times are often two or more hours. If Guam's HPSA scores were improved, then the community health centers could qualify for the National Health Service Corp. (NHSC) Loan Repayment Program, which would allow for the possibility to recruit more NHSC scholars.

There is a variety of physician types that lack adequate numbers to fully serve the patient demands at SRCHC. The following service staff are limited at SRCHC, resulting in limited offerings for patients: pediatric, obstetrics / gynecology, internal medicine, pharmacist (only one pharmacist who is shared between NRCHC and SRCHC), pharmacy technicians, medical social services to assist patients with medical, financial, and social service needs (there are none available at SRCHC), and dietician / nutritionist to provide nutrition counseling (there is a very large caseload of patients with diabetes, hypertension, cardiovascular disease, and obesity that require nutritional counseling). There are also limited referral services for specialty care, such as dental health services, ophthalmology, orthopedic, and cardiology. Some issues arise from health professionals that are under contractual agreement as well. Oftentimes they do not receive payment in a timely manner, which can impact both providers and service to their patients. In addition, some of contract personnel change their schedules on a regular basis, resulting in having to reschedule patients.

SRCHC experiences some technical issues that hinder service at the facility. SRCHC is in the process of implementing parts of the Resource Patient Management Electronic Health Records System, which will expedite things such as patient registration, clinical scheduling, and clinical documentation. However, currently, there is a lack of qualified Management Information System staff to operate the system or train other staff how to use the system. This will be an impediment to use when the system is brought online if no qualified or trained staff is available or hired.

Funding and attending to issues with vendors presents problems for receiving adequate and timely supplies and equipment at SRCHC. Limited local funding inhibits the ability to hire new staff and acquire some types of medical equipment and supplies. Vendors are often not paid in a timely manner because of funding or procurement issues, which sometimes results in SRCHC's account being put on hold, and supplies not delivered, until payment has been made. Even without the lapse in payments, medical, laboratory, and pharmacy supplies and equipment are sometimes not delivered by vendors in a timely manner. This can be especially problematic for medications and supplies that have a short-term expiration date, and arrive after or close to that date.

There is also a lack of federal funds due to Congressional budget cuts (i.e., Health Resources and Services Administration received a \$600 million cut from Congress resulting in the unavailability of funds to support the "Expanded Services" grant. Guam completed and submitted the "Expanded Services" grant along with thousands of CHCs in the U.S. and no Federally Qualified Health Center was funded).

Another major holdup for patients not receiving timely service is due to insurance or health coverage. Approximately 72 % of patients at the SRCHC are covered by Medicaid or MIP. Many of the Medicaid and MIP patients go to the SRCHC because most private providers do not accept these payments, which causes an overflow of these patients at the health centers for primary health care, laboratory, and pharmacy services. Furthermore, Medicaid and MIP eligibility listings are not issued regularly to SRCHC staff, which hampers patients' accessibility to primary and ancillary services. Patients have to see their caseworker to obtain their health insurance card, and cards often do not arrive on the first of the month, causing some patients to have to reschedule their appointments. Some patients have difficulty obtaining "prior authorization" from their insurance providers for physical exams and other specialty care services.

### **Opportunities to Enhance Services**

Efforts to improve the overall healthcare delivery system on Guam are being undertaken through the CHCs. The NRCHC is enhancing workforce development by collaborating with UOG School of Nursing, enabling the CHCs to serve as "preceptors" for medical and nursing students as they gain valuable work experience in a primary health care setting. This program also encourages students to consider employment in a Federally Qualified Health Center such as the NRCHC.

The CHCs are enhancing services to combat non-communicable diseases (i.e., diabetes, hypertension, tobacco use, obesity, etc.) through partnerships with the Non-Communicable Disease Consortium, Diabetes Coalition, non-profit community-based organizations, private health clinics, public agencies, Pacific Island Primary Care Association, and Pacific Island Health Officers Association.

The CHCs are enhancing Oral Health Services and Women's Health Services by implementing "Extended Outreach Clinics, "Women's Health" Outreach clinics. Additionally, the NRCHC provides Fluoride Varnish Treatment to prevent dental caries.

The CHCs have partnered with University of Hawaii for the implementation of the Resource Patient Management Electronic Health Record System and a grant has been submitted to assist private health clinics in the implementation of the RPMS Electronic Health Record System Electronic Health Record System; services can be enhanced through the exchange of patient health information to meet stage 2 and 3 of "Meaningful Use."

## Department of Mental Health and Substance Abuse

The Department of Mental Health and Substance Abuse (DMHSA) is responsible for health-related and social service programs such as providing comprehensive mental health, substance abuse (drugs and alcohol), and social services and programs to the people of Guam in order to improve, enhance, and promote their mental and physical well-being.

DMHSA works closely with non-profit organizations to provide care and access to mental health facilities for those in need. The main DMHSA facility is located near Guam Memorial Hospital in Tamuning and provides a variety of day treatment, inpatient, and other services for children and adults. The DMHSA facility is situated near the primary population centers on Guam and is easily accessible from Marine Corps Drive.

DMHSA facilities include both public facilities and private facilities that are operated by a private contractor whose services are secured by DMHSA. Not only does this agency provide services directly, but it also works with private and non-profit providers, the military sector, the Department of Education, Child Welfare, Department of Youth Affairs, Juvenile Probation Department, and Department of Integrated Services for Individuals with Disabilities (DISID) to provide assistance. DMHSA also operates a Crisis Hotline that provides free crisis intervention for those in need via a staffed telephone answering service. The Crisis Hotline is open 24 hours per day, seven days per week.

Facilities are located throughout Guam as a means of providing maximum accessibility to the greatest number of citizens. Outlying facilities include an adult mental health transitional residential service in Asan; a drug and alcohol treatment center, a children's outpatient center (I Famagu'onta), and a prevention center (PEACE) in Hagatna.

The privatized services that are offered through DMHSA assistance include an adult mental health permanent supportive residential center in Mangilao; child mental health residential and outpatient services, drop-in services, employment support services, and a consumer enrichment center in Tamuning; Sanctuary (drug and alcohol services) in Chalan Pago; the Oasis Empowerment Center in Tamuning; and the Salvation Army in Mangilao.

The staff at DMHSA facilities that were interviewed during the February 2012 site visit and walkthrough were:

- Joseph Grecia, Special Projects Coordinator – MIS / IT
- John Flores, Maintenance Supervisor – Facility Operations
- Joe Foster – Training
- Dave Cepeda, Safety Officer
- Dr. Ariel Ismael – Medication
- Dr. Patricia Taimanglo
- Tony Cruz and Sylvia Quinata – CIU
- Daisy Cruz, Nursing Administrator
- Marilyn Miral, Social Worker – Community Support Services
- Annie Unpingco – Children and Adolescent Services
- April Aguon – Prevention and Training
- Clarissa Maniebo – Healing Hearts Crisis Center
- Gayle Osborn – Prevention and Training
- Don Sabang – Drug and Alcohol Branch

### *Day Treatment Facilities*

#### **Rays of Hope**

The Child-Adolescent Division of DMHSA has oversight of the Rays of Hope children's therapeutic day treatment facility in Tamuning; however. This facility was outsourced to the Latte Treatment Center in 2005. The facility started operation in 2004 and provides day treatment services for children and adolescents with behavioral and emotional disabilities who are enrolled in Project I Famagu'on-ta. The facility was closed from June 2010 to March 2011 to complete safety renovations and repairs. The newly renovated facility has the capacity for 19 youths.

Rays of Hope is a community-based therapeutic intervention / behavioral management facility that provides educational instructions and personalized care. This includes assisting with social skill development, improving social interactions through skill building activities, developing leadership, and behavioral management, and improving self-esteem and school performance (DMHSA, 2011).

### **New Beginnings**

The New Beginnings facility is located in Hagatna within the J & G Commercial Center. New Beginnings helps individuals suffering from substance abuse or addiction to begin the path of rehabilitation and working towards a new start at improving their life. The program offers varying levels of treatment which range in intensity and are based on an assessment that follows the American Society of Addiction Medicine Patient Placement Model. The general types of treatment available at New Beginnings are residential treatment, social detoxification, prevention / early intervention, intensive outpatient, outpatient, and aftercare (DMHSA, 2011).

### **Sagan Mami**

Sagan Mami is jointly operated by DMHSA and Guma Mami. Funding for Sagan Mami comes from the Project for Assistance in Transition for Homelessness. This facility is a drop-in center for adults with serious mental illness where they can go to socialize and feel accepted into a community. Part of the process while at Sagan Mami is to work towards transition to other community venues so that the individual can feel accepted.

## ***Residential Services***

### **Latte Treatment Center**

Although the Latte Treatment Center is not part of DMHSA, it works closely with the agency. Also known as Therapeutic Group Home, the center provides temporary housing for up to 10 youths at any given time who are not able to live at home with their families for a variety of reasons. It provides an alternative to youths who would otherwise be in the Department of Youth Affairs or sent to another facility, some of which are off-island. Latte Treatment Center is an interim housing location, and is not a long-term housing option (DMHSA, 2011).

### **Guma IFIL**

Since 1990, Guma IFIL has provided an adult transitional residential program for individuals suffering from serious mental illness. These individuals are given 24-hour supervision by qualified staff. Through the program, residents receive training and skills to help them attain greater independence and self-sufficiency. They are provided with case management, psychiatric follow-up, day treatment services, and counseling (DMHSA, 2011).

### **Guma Hinemlo'**

DMHSA and Guma Mami jointly operate Guma Hinemlo' (healing home). This permanent supportive housing program was developed for homeless adults who have a serious mental illness. DMHSA provides day treatment case management services and psychiatric consultation, while Guma Mami operates the facility. Residents are those who are clinically stable, but are not able to currently live independently and who have been transferred from other areas within DMHSA. They are provided with 24-hour daily monitoring, as well as transportation to supportive service locations (DMHSA, 2011).

## ***Other Facilities***

### **Healing Hearts Crisis Center**

The Healing Hearts Crisis Center (HHCC), located in Tamuning, is a rape crisis center operated by DMHSA. It provides a place where individuals who have been victims of sexual assault can go to receive assistance and support. The programs and services provided at the center include:

- **Medical Legal Examination:** Access to registered nurses and medical doctors who have been trained to perform medical-legal examinations on children and adults who may have experienced a sexual assault. HHCC is equipped to perform the examination in a private, calming environment, away from the crisis setting of the hospital emergency room. The medical-legal exam may include treatment for sexually transmitted infections, HIV testing, emergency contraception and collection of forensic evidence.
- **Social Work Services:** HHCC offers crisis intervention, short-term case management to coordinate services, and referrals for counseling and other services that may be needed. HHCC may offer assistance with payment for counseling services as funding is available.
- **Multi-Disciplinary Team Interviews:** It's best that a person has only one interview to limit the trauma of reliving the assault. HHCC works with a team of agencies by providing a neutral location to interview the patient on a one-time basis to avoid repetitive questions at different agencies. HHCC has specially-trained staff to conduct these interviews while the team

observes through a one-way mirror to collect information necessary for their purposes.

- **Community Outreach and Public Awareness:** Education and public awareness are the best ways to help women, children and men who have survived sexual assault and to prevent sexual assault. HHCC is involved with outreach programs for elementary, middle, and high schools and the community at large to talk about appropriate touching, when and how to say “NO,” and personal safety.

### **Sanctuary**

Sanctuary is a community-based organization that provides services for Guam’s youth who are going through family conflicts. It is not a part of DMHSA, but works closely with the agency to improve the quality of life for these individuals. The services that are provided by Sanctuary include temporary safe refuge for youths during family conflicts and abuse, a Crisis Hotline, supportive counseling for youths and their families, casework and counseling, outreach, and education and prevention programs.

## ***Existing Conditions***

### **DMHSA Main Facility**

DMHSA operates its primary facility adjacent to GMH in Tamuning. This facility offers a variety of services for both adults and children. For adults with serious mental illnesses and some other afflictions, there is an Adult Inpatient Unit and a Medication Clinic to help treat and rehabilitate them. The Medication Clinic also caters to less severely mentally ill individuals who are unable to care for their mental condition due to lack of resources, and individuals experiencing acute emergencies or crises. There is an outpatient adult counseling branch that specializes in individual, marriage, and family therapy counseling and provides consultations, referrals, and collaborations with other government agencies and the private sector.



*Department of Mental Health and Substance Abuse Main Facility*

For those adults that suffer from a serious mental illness and are in long-term care at DMHSA, day treatment services are offered to help them learn social and other skills needed to rehabilitate and transition to home and community living.

Outpatient services are available for children, adolescents, and their families in areas including intake, emergency and crisis assessment and intervention, early mental health screening and identification, public education and awareness, and counseling and referral services. The Child Inpatient Unit provides acute care for children who are admitted via case management, care coordination, and counseling.

There are, on average, between 15 and 20 patients overnight at the DMHSA main facility at any given time. There are three inpatient units at the facility: the Adult Inpatient Unit (AIU) 1 is for acute disorders, patients off the streets, those with behavioral problems, and those who have been admitted to the facility for long-term care; AIU 2 is for patients who are getting stable and ready to be released or go to a group home; and the Children Inpatient Unit (CIU) is for children that are admitted to the facility. Each of the units has eight patient bedrooms and 16 patient beds. Each unit also has an associated nurses’ station, a therapy room, and common space for interaction among patients. AIU 1 and CIU each have seclusion rooms for patients. There are 16 group homes off-site that supplement the DMHSA main facility. DMHSA operates eight of these homes and the remaining are outsourced. The homes are four-bedroom homes with two beds per room, accommodating a maximum of eight patients. The homes are organized to accept patients of similar disorders so that on-site staff can be specialized in a

particular disorder and more easily manage the patients and cater to their needs.

There is a large training room on the first floor, which was converted from a storage room. This is used for training sessions, group meetings, group therapy, staff meetings, and other uses as needed. There is another training room on the third floor as well. There are rarely children in the second floor children's wing of the facility, so one of the children's rooms is sometimes used for professional crisis management. Other areas in the facility include many offices for administrative staff, psychiatrists, doctors, and other personnel; observation rooms, group therapy rooms, exam rooms, libraries, and staff areas.

The DMHSA main facility now has security guards on duty 24 hours a day, seven days a week. This service was implemented just a shortly before the facility site visit in February 2012. Funds are being sought to install additional security measures, including a camera system, card swipers, panic buttons, and an intercom system, at an estimated cost of \$250,000. Currently, only certain members of staff have keys issues to be able to access certain areas of the facility.



*View of the outside common area*

### **Children and Adolescent Services Division**

The Children and Adolescent Services Division of DMHSA is located off-site from the main facility and operates from 8:00 am to 5:00 pm, Monday through Friday. It is located in Hagatna at the J & G Commercial Center, and provides services for children and persons between the ages of five to 21 who have emotional or behavioral problems. Services that are provided to youth and their families include psychiatric evaluation, family orientation, and counseling and support to children and their families on how to cope with emotional and behavioral issues and be better suited to work towards helping the youth

become better adjusted. The youth that are served by this division are generally referred to from the court / legal system or a school. Services are provided both on-site at the division office and via in-home visits. Home visits are important to get a feel for the environment that the youth are living in and how that could affect their demeanor. Staffing at this division is composed of 22 people, and the physical space of the office is composed of four suites.

### **Drug and Alcohol Services Branch**

The Drug and Alcohol Services Branch is also located in the J & G Commercial Center in Hagatna and operates from 8:00 am to 5:00 pm, Monday through Friday. The branch provides inpatient and outpatient services and support, as well as community-based programs. The facility at the J & G Commercial Center is where outpatient services are offered, while inpatient services are provided through private contractors off-site. The facility consists of four suites, totaling approximately 4,000 square feet. Amenities at the facility include a large group room, a small group room, four offices for substance abuse treatment counselors, one room for family sessions and meetings, one storage room, one medical records room, one IT closet (which is used by all three DMHSA groups at the J & G Commercial Center), and an office for psychiatric technicians.

### **Healing Hearts Crisis Center**

The Healing Hearts Crisis Center (HHCC) is located off-site from the main DMHSA facility, at 215 Father Duenas Drive in Tamuning. Its normal hours of operation are from 8:00 am to 5:00 pm Monday through Friday, but there is a 24 hour a day, seven days a week response service for some cases. The types of counseling and services that are offered include sexual assault examinations, forensic interviews, crisis counseling, and sexual abuse prevention and outreach for all ages. The facility is approximately 1,566 square feet and includes one exam / treatment room, one interview room, one observation room, an office for the forensic examiner, an office for the sexual assault nurse, and a patient waiting area with five seats. Staff identified all of these to be adequate except for the number of observation rooms. Staff also identified a need for more storage space to secure patient records. There is a desire to add a records room so that all files can be stored safely in one place. In terms of security, it was also identified that there is an inadequate amount of surveillance and closed circuit television (CCTV) equipment to monitor the facility. There are currently four surveillance / CCTV units in place, which was identified as inadequate.

### **Prevention and Training Branch**

The Prevention and Training Branch (PTB) is an off-site facility from the DMHSA main building, and is located in Hagatna at the J & G Commercial Center. Its hours of operation are from 8:00 am to 5:00 pm Monday through Friday. The facility is 4,856 square feet. This facility does not provide medical services, but provides training and education opportunities to the community such as awareness on substance abuse, suicide prevention training, suicide survivors groups, youth programs (including a youth help line), and programs that address lifestyle issues (stress / anger management, tobacco cessation, and crisis intervention). The goal is to educate and train Guam's community leaders so that they can help to enhance positive physical, emotional, mental, and spiritual health among Guam's residents. Key focus areas to achieve this are preventing and reducing alcohol, tobacco, and other drug use and their related problems. The facility includes an office, a training room a kitchen, and cubicles for staff.

### ***Issues and Challenges***

#### **DMHSA Main Facility**

DMHSA operates the only inpatient mental health facility in the West Pacific. As such, it also serves the military population on Guam. The Navy relies heavily on the facilities for its personnel who experience mental trauma. If the facility becomes overcrowded or there is an influx of new patients that it cannot handle, patients are typically sent off-island to seek treatment.

A suit filed against DMHSA resulted in the department being put under a Federal Management Team (FMT) to help improve service and provide better treatment options, more staff, and more physical space for patients. Although still in the planning stages, the FMT is proposing to build a new facility that will have more space to treat those with mental health issues. GovGuam would instead prefer to move the children's inpatient ward to a new location and expand the adult inpatient ward for more beds, which would allow greater access for patients during periods of increased occupancy. One problem for access is that the children's inpatient ward is not big enough and there is often a waiting list for children. Some are sent off-island because they cannot wait for an opening. Moving the ward separately from the main facility could allow for more space for children as well.

The existing DMHSA facility does not meet current standards or needs and will not support the court imposed increase in staff required to satisfy the Federal receivership court order. DMHSA reported substandard air quality in the building, fire suppression risks, and mold problems. Since DMHSA provides the only mental health inpatient facility in the West Pacific, it must support a large and diverse population, including the military. Its limited space and poor upkeep have been problematic in effectively serving the entire population demographic.

The FMT Action Plan recommends the construction of a 39,000 square foot multipurpose day treatment center that will provide treatment, services, programs, training, and evaluation. Along with all of the other recommendations in the Plan of Action, which includes increased staffing levels, training, and reorganizing programs and housing services, the Government of Guam would save an estimated \$6 million a year based on the combined 2010 budgets of DMHSA and DISID.

Instead of building a new facility, the Government of Guam would prefer to move the children's inpatient ward to a different facility outside the DMHSA main facility, and add additional beds and space to the main facility for adult inpatient care.

The FMT also recommended building a new maintenance facility (storage and shop) outside, which would free up space currently used for storage. The Maintenance Department supplies and maintains the DMHSA main facility, outlying offices, and eight care homes, thus making it important to have adequate space for storage and supplies, which currently does not exist. Other priorities have been identified that take precedence over a new maintenance shop, including replacing all light bulbs in the parking lot (which were out during the time of the site visit), and cleaning the exterior of the building.

Several concerns were expressed regarding the entire DMHSA physical facility needs were identified during staff interviews conducted at the site visit in February 2012:

- AIU 2 does not currently have a seclusion room, but needs one.
- The CIU does not have any classroom space. If a child is admitted long-term during the school year, he or she would miss out on educational opportunities for the amount of time they are at the facility. It was mentioned that one of the rooms in the CIU could be converted to a classroom.

- There is a need for a short-term admissions area, for patients admitted between 12 to 24 hours, instead of admitting them into the inpatient unit. Along with this would be the need for a crisis intervention room and an observation room.
- Office space is lacking for the number of staff that operates at DMHSA. Some offices are shared by multiple personnel. If additional staff is hired, existing offices will be even more cramped.

During the site visit, many problems were noted by staff for the AIU:

- The bathrooms that are in patient bedrooms do not have a floor drain.
- The bathrooms are unsafe for certain types of patients. Some patients have broken bathroom mirrors and attempted to injure themselves or others. Other instances have involved breaking bars off the shower or wall and using them as weapons.
- The exterior wall on the outside balcony is not tall enough and patients may be able to jump or fall over the edge.
- There is no filtered water or ice system available for patients.
- The beds in the rooms are leftover hospital and prison beds, and should be upgraded for better comfort and appropriateness.
- The bedroom windows are not tinted and can be viewed into from the outside, reducing patient privacy.
- There are no dedicated housekeepers for the AIUs to ensure a regular cleaning schedule for sanitary reasons, safety, and comfort.
- Staff would like to have a stove to teach cooking skills to patients who have progressed in their treatment and are in need of learning the skills needed on a daily basis when living independently.

The majority of the facilities operated by, or in conjunction with, DMHSA are located in the central and northern portions of Guam. These facilities do not serve the same types of emergency situations that a hospital does thus it is not as crucial to access them in the most rapid manner. However, for families or friends wishing to visit someone who is residing within one of the

locations, or for those who must get medication from the main facility, people who live in the southern villages must travel north to reach the DMHSA facilities.

### **MIS / IT**

The IT infrastructure at the DMHSA main facility is outdated and in poor condition. The wiring and equipment all need to be upgraded and replaced. It is between 15 to 20 years old and does not meet the current needs of the facility. A plan is currently being developed to replace the existing servers, with the possibility of using cloud and web-based processing being considered. Upgraded software is also needed for the pharmacy to better manage and handle patients' needs. The federal injunction will provide for some financial assistance to pay for some software upgrades at DMHSA, but will not cover the cost of maintaining the new software or systems in the future. There may be a lack of funding to keep up the software in the future, which could cause new complications or setbacks. The injunction is estimated to require an increase of IT employees by about 50 percent, but there is not enough office space to accommodate these new personnel.

### **Children and Adolescent Services Division**

The major problem experienced by this division is a lack of space. The division occupies four suites in the building that it is located. When meeting with youth and families, there is no privacy for information to be discussed because of the lack of space, and the meeting rooms not being sound-proofed. There are only two meeting rooms, when a minimum of four are needed to adequately serve the demand. Ideally, six rooms would be a better amount. Staff also indicated that they would like to have a play therapy room for interactive sessions. In terms of staffing, a psychiatrist is needed.

In general, the J & G Commercial Center that houses several DMHSA satellite facilities was identified to have some issues that impact service. There is inadequate parking at the building to support customer demands on certain days. Geographically, there is a river behind the building, which could cause flooding issues in the event of a typhoon. Additionally, there is a bar nearby, which is not a desirable use given some of the client-base that attends sessions or meetings at the DMHSA facilities.

### **Drug and Alcohol Services Branch**

Similar to the Children and Adolescent Service Division, the Drug and Alcohol Services Branch was identified to be lacking in space. Staff identified that another 2,000 square feet is needed to adequately serve the needs of

the clients. As part of this, an additional large meeting room is needed, as well as a room for a peer specialist, and a room for evidence-based meetings. The current rooms are not sound-proofed, which inhibits client privacy during meetings or sessions. This branch previously offered a day treatment program. However, during the 2002 typhoon, the facility was damaged and the program was ceased. Staff indicated that they would like to reinstate this program for the benefit of Guam's citizens. In terms of staffing, a psychiatrist is needed.

### **Healing Hearts Crisis Center**

In terms of staffing, HHCC currently has one medical professional, two allied health professionals, and two administrative / support staff. There is an identified need for additional medical professionals. HHCC currently has a contracted medical consultant (an MD) who takes calls at least 48 hours a month. Healing Hearts also contracts out services for three on-call examiners (one MD and two nurse practitioners) to cover weekends and holidays to ensure a 24/7 coverage of services to sexual assault victims. HHCC has experienced an increase in need to respond to sexual assault cases, requiring the above mentioned additional examiners.

HHCC depends on local government funds to cover employee salaries and building maintenance. When reduction of government spending is limited, vital services are also impacted. HHCC receives a federal grant to provide training to its staff to conduct forensic interviews and examinations but most importantly the grant allows HHCC to offer prophylactic treatment for pregnancy and sexually transmitted infections at no charge. The grant also allows HHCC patients to go through counseling.

### **Prevention and Training Branch**

No existing issues were identified from PTB staff for the facility or staffing levels.



## Section 3: Private Providers

### Inside Section 3 . . .

Interview and Site Visits.....	3-2
Private Providers List.....	3-3
Private Provider Survey .....	3-23
Key Survey Findings .....	3-26

*Private providers are those that are not affiliated with the Government of Guam, but are operated by private companies, individuals, or partner groups. Generally, private providers are more specialized in a particular medical field and offer services based on that specialty. Some private providers include multiple specialties within one facility. Since these providers are operated by private individuals or groups, they can be more exclusive to the patients they serve, instead of being required to serve all residents of Guam (i.e., they may have certain insurance requirements for patients to be able to get treatment). Site visits and brief interviews were conducted with many of the private providers on Guam to obtain information on the types of services offered and any perceived concerns that impact the provision of service. In addition, all providers were requested to fill out and return the provider survey. The submitted survey results, as well as the site visits and interviews were used to develop the write-up for private providers.*

*This section is organized into three parts. The first part provides is an overview of the information that was gathered during site visits and interviews with private providers. The second section includes a map showing the locations of all private providers that were identified as relevant for this plan, as well as a list of all of the providers with their contract information and a brief description of programs and services offered. The final section provides the results and overview of the provider survey, that captures a snap-shot in time of staffing, types and size of service provides; available and needed medical equipment and facilities; patient access and availability to medical providers; and use of electronic record systems.*

## Interview and Site Visits

The methodology for identifying health providers on Guam started with going through the Health Providers Index that was developed during the Guam Five Year Health and Social Services Strategic Plan. This list was supplemented by browsing the local Guam phone book to obtain additional providers, and through meetings with public and private providers who identified additional facilities that were not previously identified. Once the final list of providers was established, which contained a total of 80 providers, the list was narrowed down by removing certain facilities that were determined not to be applicable for the purposes of the Medical Delivery Plan, including dental, optical, and behavioral / mental health providers. Additionally, some of the originally identified providers were discovered to no longer be in service, and were thus removed from the list. The final list was narrowed down to 58 valid private health provider facilities. As part of the survey distribution process (discussed later in this section), a total of 45 of the providers were visited in person (not all were able to be visited due to scheduling and time constraints). Email addresses were obtained for 50 of the providers, and the remaining nine were reached via telephone.

An important piece in gathering information to identify which medical services are available and which are needed on Guam were one-on-one interviews with staff at private provider facilities. The interviews were informal in nature and were meant to gather additional information on any issues that the facility, or Guam as a whole, is currently facing in terms of lack of services, facilities, types of medical professional specialties or any additional relevant observations to the data collection and survey process. For facilities where medical staff and administrators had available time during the process of introducing them to the provider survey, brief questions were asked about the state of the facility, existing services they offer, ability to perform their services, relationships with other facilities or shared resources, and constraints that impact their timeliness in delivering services to patients.

Due to the demands of the medical profession, not all providers visited had available time to fully participate in one-on-one discussions. In the event that a facility administrator was not available for interview, a paper survey was made available to the provider to complete and submit. Some providers engaged in brief interviews, but did not have any specific concerns or issues that affected their facility or provision of their services.

Several of the private provider facilities identified having similar issues as the public providers. .

The private providers that participated in the site visit interviews are:

- Pacific Medical Group – Stephanie Untalan, Professional Service / Special Projects Manager
- Guam Orthopaedic Associated – Mary Camacho
- Guam Radiology Consultants – Roy Adonay, Chief Operations Officer
- Guam Dialysis Center – Charlyn Haun, MHR, Administrator
- Pacific Urology Consultants, LLC – Christine Dewitz, Clinic Manager
- Dr. Shieh’s Clinic – Thomas Shieh, MD, FACOG
- The Doctor’s Clinic, Mary Ann Cabrera, Executive Assistant
- Sagua Managu, Lina Leon Guerrero, General Manager
- Pacific Hand Surgery Center – Dana Tamayo
- Guam Surgicenter – Melissa Waibel, RN, BSN, CNOR, CASC, Chief Clinical Officer
- Island Cancer Center – Colin O’Connell, PhD, Practice Administrator
- American Medical Center – Connie Nazareno, CPC, Billing Manager
- Pacific Surgical Arts – Stephanie Fajaran
- PMC Isla Health Systems – Peter Leon Guerrero, Director
- Guam Surgical Group – Vivian Novak

Noteworthy, the responses from field interviews were consistent with and reflected in the responses received from the survey. Much of the feedback received during the interviews related to the topics of medical professional specialties and types of services that are not available on Guam or have limited availability to support the entire island. The types of medical professionals that were identified as lacking on Guam are as follows:

- Dermatologist
- Gastroenterologist
- Rheumatologist
- Pulmonologist
- Pediatric cardiologist

- Neurosurgeon
- Urologist, only one is on the island.
- Hematologist, only one is on the island.
- Biomedical engineer, one is on the island.
- Ear, Nose, and Throat Physician, only one on Guam and chooses not to operate at Guam Memorial Hospital (GMH) because GMH does not provide liability coverage

Other important services that were identified as lacking on Guam during the interviews and survey were:

- No PET scan on Guam.
- No MRI machine at the hospital.
- No Type 2 lab on Guam – samples for testing must be sent to Hawaii. This sometimes takes up to two weeks to get samples returned.

Other notable comments that were made during the interviews are as follows:

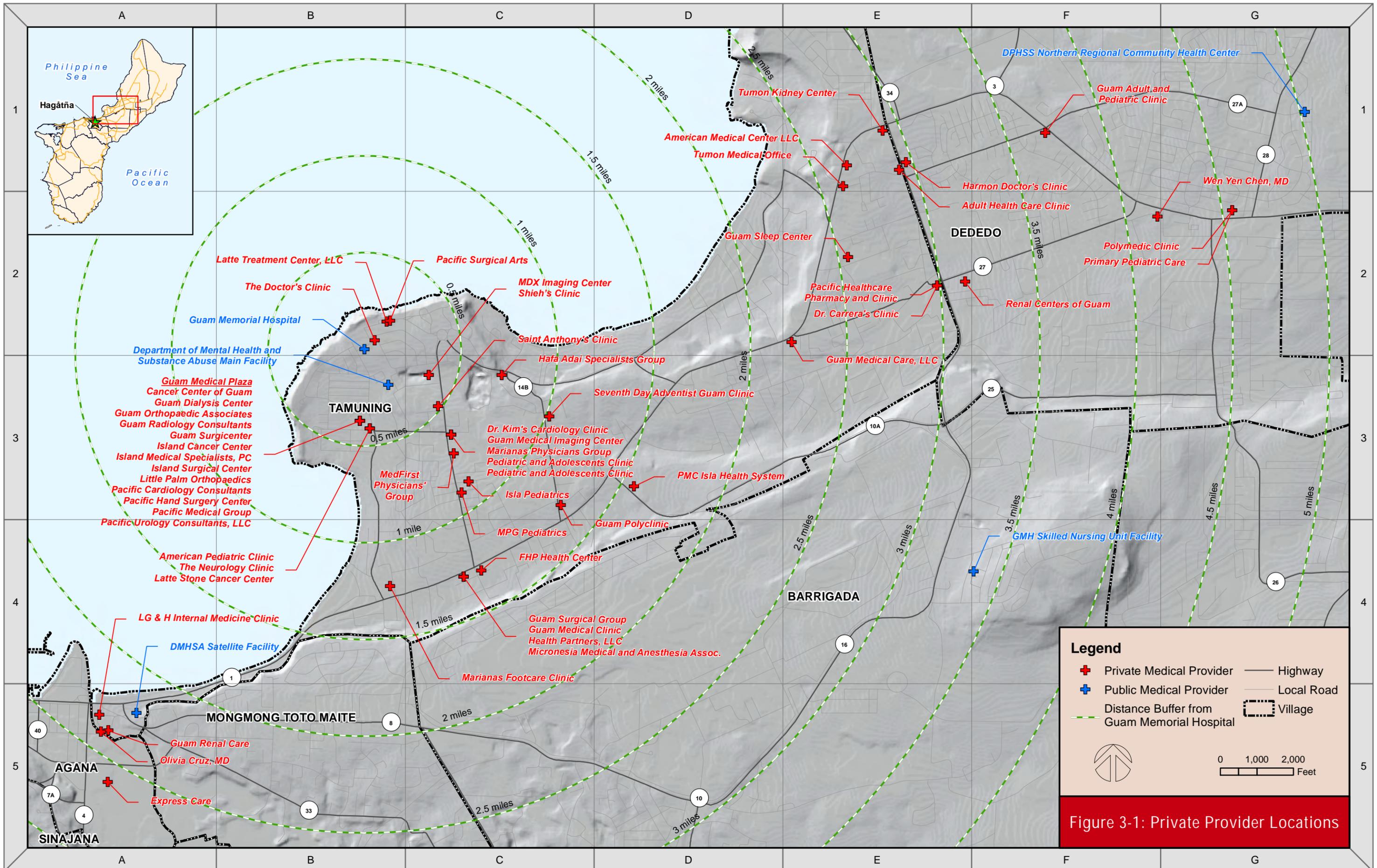
- Insurance is one of the biggest inhibiting factors of providing services to patients for many private providers. Sometimes providers have to wait too long for claims to be approved before services can be provided, but sometimes they cannot delay service for the patient’s sake. In addition, certain types of medication must receive authorization from insurance companies before it can be administered to patients.
- It is often hard to adequately procure supplies due to the amount of time it takes to arrive from the US mainland. For providers that perform services or procedures at GMH, the hospital will not let them bring their own supplies, so the provider must rely on the hospital to have adequate supplies to perform the services, which is not always the case.

- Many providers are losing patients to the Philippines or other nearby countries because it is cheaper for insurance companies to send patients there than be treated on Guam for some types of services or procedures. When patients travel to these areas for treatment, it is often difficult to get medical records.
- There is a doctor on Guam who can perform kidney transplants, but there are no facilities available on Guam to perform this operation, so patients must seek care off-island.

### Private Providers List

This section includes a map and a list of all of the private providers that were identified as relevant to seek input for the development of this Medical Services Delivery Plan. Each of the providers listed in this section were given the provider survey and asked to complete and return the survey in order to gain insight into the services available or lacking on Guam. Figure 3-1 illustrates the location of each of the identified private provider facilities. The private providers are located in the northern villages of Guam, leaving a void in the availability of services in the southern portions of the island. Following Figure 3-1 is a table that provides a brief overview and contact information for each of the private providers that were identified as currently providing service on Guam. Limited information was available for some of the providers. The table also includes a “Map Index Location” identifier that references the location of the respective facility on Figure 3-1.

*Please see the next page.*



Fig\_3\_1\_Private\_Providers\_RGR\_20101030.pdf

*This page left blank intentionally (back of Figure 3-1)*

<b>Adult Health Care Clinic</b>		<b>671-647-5546</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> E-1  <b>Address:</b></p> <p style="margin-left: 40px;">  2211 Army Drive, Route 16              Harmon Manhattan Plaza 1 Unit 105-106              Tamuning, Guam 96913         </p>	
<b>American Medical Center, LLC</b>		<b>671-647-8262</b>
<a href="http://www.americanmedicalcenter.net/" style="color: white;">http://www.americanmedicalcenter.net/</a>		
<p><b>Overview:</b></p> <p>Provides services in pediatrics (neonatal care, immunizations, school physicals, learning and physical development, and adolescent care), internal medicine (cancer screening, diabetes management, high blood pressure treatment, executive health physicals, women’s health evaluation, and treatment of STDs), and family medicine (well-child checkups, toddler care, modification of risk factors for heart disease, tuberculosis screening, general medical evaluations for children and adults, and end-of-life care). The facility also has a fully-equipped Triage Room, minor surgery suites, and a community pharmacy.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Pediatrics</li> <li>■ Internal medicine</li> <li>■ Family medicine</li> </ul> <p><b>Map Index Location:</b> E-1  <b>Address:</b></p> <p style="margin-left: 40px;">  1244 North Marine Corps Drive              Upper Tumon, Guam 96913         </p> <p>Accepts Medicare</p>	
<b>American Pediatric Clinic</b>		<b>671-647-2721</b>
<p><b>Overview:</b></p> <p>Specializes in pediatric care and provides a variety of services for children, including diagnostics and screening, procedures, treatment, circumcisions, surgical specialty services, medical specialty services, and emergency care.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Pediatrics</li> <li>■ Circumcision</li> </ul> <p><b>Map Index Location:</b> B-3  <b>Address:</b></p> <p style="margin-left: 40px;">  241 Farenholt Ave. Suite 106              Tamuning, Guam 96913         </p>	
<b>Cancer Center of Guam</b>		<b>671-647-4656</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> B-3  <b>Address:</b></p> <p style="margin-left: 40px;">  633 Governor Carlos Camacho Road, Suite 1              Guam Medical Plaza              Tamuning, Guam 96913         </p>	

<b>Dr. Carrera's Clinic</b>		<b>671-649-1058 / 9</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> E-2  <b>Address:</b></p> <p> 1757 Army Drive, Route 16  Suite 109, Guam Business Center  Harmon, Guam 96929</p>	
<b>Dr. Kim's Cardiology Clinic</b>		<b>671-646-3880</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> Pemar Place Suite 103  472 Chalan San Antonio  Tamuning, Guam 96913</p>	
<b>Express Care</b> <a href="http://www.expresscareguam.com" style="color: white;">http://www.expresscareguam.com</a>		<b>671-477-2873</b>
<p><b>Overview:</b></p> <p>Express Care offers a wide range of family healthcare, including both medical and cosmetic services. The medical services include women's care, sexual health, school and work physicals, laboratory testing, flu shots, travel advice, and treatment of common illnesses. The cosmetic services include medical skin treatments, microdermabrasion, acne, laser skin therapy, wrinkle removal, laser hair removal, laser spider vein removal, keloid scar treatment, lipo-dissolve, wart treatment, skin tag removal, mole removal, and Botox.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Primary care</li> <li>■ Emergency</li> <li>■ Laboratory</li> <li>■ Procedures / treatment</li> <li>■ Pediatrics</li> <li>■ Mental health</li> <li>■ Laser skin treatment</li> <li>■ Laser hair removal</li> <li>■ Cosmetic skin services</li> </ul> <p><b>Map Index Location:</b> A-5  <b>Address:</b></p> <p> Agana Shopping Center, Suite 207  Agana, Guam</p>	

**FHP Health Center** **671-647-3526**  
<http://www.takecareasia.com>

<p><b>Overview:</b>                  FHP Health Center integrates complete and optimized healthcare solutions through twelve Centers of Medical Care on Guam and Saipan. Services offered include pediatrics, adult medicine, surgical procedures, urgent care, and occupational health services. The FHP Health Center also includes a vision center, dental center, cancer center, and pharmacy.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Pediatrics</li> <li>■ Adult Medicine</li> <li>■ Radiology</li> <li>■ Surgicenter</li> <li>■ Urgent Care</li> <li>■ Occupational Health Services</li> <li>■ Vision Center</li> <li>■ Dental Center</li> <li>■ Women's Center</li> <li>■ Home Health</li> <li>■ Cancer Center</li> <li>■ Pharmacy</li> </ul> <p><b>Map Index Location:</b> C-4  <b>Address:</b></p> <p style="text-align: center;">  548 South Marine Drive, Annex Building                  Tamuning, Guam 96911             </p> <p>Accepts Medicaid, No Medicare</p>
--	---

**Guam Adult and Pediatric Clinic** **671-633-4272**

<p><b>Overview:</b>                  Provides primary care and testing / treatment for adults and youth.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ EKG / ECG</li> <li>■ Lab testing</li> <li>■ Primary care</li> <li>■ Pediatrics</li> <li>■ Procedures / treatment</li> </ul> <p><b>Map Index Location:</b> F-1  <b>Address:</b></p> <p style="text-align: center;">  612 N Marine Corps Dr., Suite 8                  Dededo, Guam 96929             </p>
--	--

<b>Guam Dialysis Center</b> <span style="float: right;">671-646-3516</span> <a href="http://www.guamdialysis.com/facilities.html" style="color: white;">http://www.guamdialysis.com/facilities.html</a>	
<p><b>Overview:</b>                  Provides both hemodialysis and peritoneal dialysis services. The facility has 22 dialysis stations. The mission is to provide an innovative approach to the delivery of services for people with end stage renal disease which satisfies customer / patient needs and improves their quality of life.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Dialysis</li> </ul> <p><b>Map Index Location:</b> B-3  <b>Address:</b></p> <p> Guam Medical Plaza, Suite 106                  633 Gov. Carlos Camacho Road                  Tamuning, Guam 96911</p>
<b>Guam Medical Care, LLC</b> <span style="float: right;">671-647-4174</span>	
<p><b>Overview:</b>                  Provides an urgent care clinic and ambulatory health care facilities.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Urgent care</li> <li>■ Ambulatory health care</li> </ul> <p><b>Map Index Location:</b> E-2  <b>Address:</b></p> <p> 744 N Marine Dr. Suite 105                  Tamuning , GU 96913</p>
<b>Guam Medical Clinic</b> <span style="float: right;">671-646-7678</span>	
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> C-4  <b>Address:</b></p> <p> ITC Bldg., Suite 126                  Tamuning, Guam</p>
<b>Guam Medical Imaging Center</b> <span style="float: right;">671-649-9227</span>	
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Nuclear medicine</li> <li>■ Imaging diagnosis</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> Pemar Place Suite 111                  472 Chalan San Antonio                  Tamuning, Guam 96913</p>

<b>Guam Orthopaedic Associates</b> <span style="float: right;">671-646-6110 / 6356</span>	
<p><b>Overview:</b> Provides general and specialty orthopaedic services.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Surgical specialty services</li> <li>■ Medical specialty services</li> <li>■ Emergency</li> <li>■ Procedures / treatment</li> <li>■ Pediatrics</li> </ul> <p><b>Map Index Location: B-3</b> <b>Address:</b></p> <p> Guam Medical Plaza, Suite. 212 633 Gov. Carlos Camacho Road Tamuning, GU 96913</p>
<b>Guam Polyclinic</b> <span style="float: right;">671-646-6822 / 6623</span>	
<p><b>Overview:</b> A multiservice location which includes a dental center, gynecology clinic, pregnancy clinic, abortion clinic, an on-site civil surgeon.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Diagnosis / screening</li> <li>■ Surgical specialty services</li> <li>■ Emergency</li> <li>■ Procedures / treatment</li> </ul> <p><b>Map Index Location: C-3</b> <b>Address:</b></p> <p> 138 Ypao Road Tamuning, Guam 96931</p>
<b>Guam Radiology Consultants</b> <span style="float: right;">671-647-3667 / 671-649-1001</span> <a href="http://www.guamradiology.com/" style="color: white;">http://www.guamradiology.com/</a>	
<p><b>Overview:</b> Provide advanced imaging, including MRI and CAT scan as well as routine x-rays, 2D Echocardiography, advanced digital Holter monitoring, high resolution ultrasound - including 4-D, Fluoroscopy (upper GI and barium enema exams), Bone Mineral Density studies and mammography with computer aided diagnosis. The interventional team offers a line of services including biopsies, angiograms with angioplasty and stent placement without the need to be hospitalized. Uterine artery embolization, interarterial chemotherapy and declotting of dialysis access grafts and fistulas can all be completed without the need to be admitted to a hospital.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ EKG / ECG</li> <li>■ Spirometry</li> <li>■ X-Ray</li> <li>■ Ultrasound</li> <li>■ IR Radiology</li> <li>■ Surgical specialty services</li> <li>■ Medical specialty services</li> <li>■ Procedures / treatment</li> </ul> <p><b>Map Index Location: B-3</b> <b>Address:</b></p> <p> Guam Medical Plaza 633 Carlos Camacho Rd., Suite 210 Tamuning, Guam 96913 USA</p>

<b>Guam Renal Care</b> <span style="float: right;">671-475-3600</span> <a href="http://www.guamdialysis.com/facilities.html#renal" style="color: white;">http://www.guamdialysis.com/facilities.html#renal</a>	
<b>Overview:</b> A free-standing hemodialysis facility that provides hemodialysis services with 20 stations, including a separate isolation area for those patients who are hepatitis positive. The facility is Medicare certified and has maintained a relationship with the Western Pacific Renal Network #17. This certification and relationship with the Network indicate that the facility meets federal regulations and clinical standards.	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>■ Hemodialysis</li> </ul> <b>Map Index Location:</b> A-5 <b>Address:</b>  265 Chalan Santo Papa Hagatna, Guam 96910  Accepts Medicare, Medicaid, and MIP
<b>Guam Sleep Center</b> <span style="float: right;">671-647-6669</span> <a href="http://www.guamsleepcenter.com/" style="color: white;">http://www.guamsleepcenter.com/</a>	
<b>Overview:</b> Provides sleep studies and monitors sleep activity to determine various sleep disorders, sleep complaints, or daytime sleepiness.	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>■ Sleep studies</li> <li>■ Counseling</li> </ul> <b>Map Index Location:</b> E-2 <b>Address:</b>  Pia Marine # 609, 193 Tumon Ln. Tamuning, Guam 96921
<b>Guam Surgical Group</b> <span style="float: right;">671-649-7588</span>	
<b>Overview:</b> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <b>Map Index Location:</b> C-4 <b>Address:</b>  590 S Marine Corps Dr. ITC Building, Suite # 211 Tamuning, Guam 96913
<b>Guam Surgicenter</b> <span style="float: right;">671-646-3855 / 35</span> <a href="http://guamsurgicenter.com/" style="color: white;">http://guamsurgicenter.com/</a>	
<b>Overview:</b> A medical facility equipped for outpatient care that conducts surgical procedures for children and adults. The most common procedures include general surgery, gynecological, orthopedic, plastic, dental and oral, hand, eye, ear, nose and throat, and colon and rectal surgeries, as well as pain management.	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>■ Outpatient surgery</li> </ul> <b>Map Index Location:</b> B-3 <b>Address:</b>  Guam Medical Plaza 633 Governor Carlos Camacho Road, Suite 101 Tamuning, Guam 96913  Accepts Medicare

<b>Hafa Adai Specialists Group</b>		<b>671-647-4542</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ EKG / ECG</li> <li>■ X-Ray</li> <li>■ Ultrasound</li> <li>■ Surgical specialty services</li> <li>■ Procedures / treatment</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 280 Pale San Vitores Rd.  Sunflower Villa  Tamuning, Guam 96913</p>	
<b>Harmon Doctor's Clinic</b>		<b>671-637-1777</b>
<p><b>Overview:</b></p> <p>Provides ambulatory health care facilities, health service, clinical services, and has an on-site civil surgeon.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Health clinic</li> </ul> <p><b>Map Index Location:</b> E-1  <b>Address:</b></p> <p> 2214 Army Drive  Dededo, Guam 96929</p>	
<b>Health Partners, LLC</b>		<b>671-646-5227 / 5228</b>
<p><a href="http://healthpartnersguam.com/" style="color: white;">http://healthpartnersguam.com/</a></p>		
<p><b>Overview:</b></p> <p>Provide a comprehensive range of clinical and public health services including diagnostic, therapeutic, and ancillary clinical services, technical assistance in health program development, management, and evaluation, and provides technical assistance to the Guam community for controlling the tobacco epidemic.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Health clinic</li> <li>■ Tobacco cessation</li> </ul> <p><b>Map Index Location:</b> C-4  <b>Address:</b></p> <p> ITC Building  590 South Marine Corps Drive, Suite 226  Tamuning, Guam 96913</p>	
<b>Isla Pediatrics</b>		<b>671-647-4466 / 8495</b>
<p><b>Overview:</b></p> <p>Provides general pediatric care.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Primary care</li> <li>■ Pediatrics</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 132 East Espirumtu Street  Tamuning, Guam 96913</p>	

<b>Island Cancer Center</b>		<b>671-646-3363</b>
<a href="http://www.islandcancercenter.com/">http://www.islandcancercenter.com/</a>		
<p><b>Overview:</b></p> <p>The Island Cancer Center is an extension of the Guam Surgicenter. The Center specializes in radiation and intensity modulated radiation therapy to treat cancer patients. The Island Cancer Center works with all cancer care specialists on Guam and the broader medical community to collaboratively provide each patient with the best cancer care.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Radiation therapy</li> </ul> <p><b>Map Index Location:</b> B-3</p> <p><b>Address:</b></p> <p> Guam Medical Plaza 633 Governor Carlos Camacho Road, Suite G-1 Tamuning, Guam 96913</p>	
<b>Island Medical Specialists, PC</b>		<b>671-646-6610 / 6356</b>
<p><b>Overview:</b></p> <p>Provides medical specialty services and offers a range of treatment options, include surgical specialty services.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Surgical specialty services</li> <li>■ Medical specialty services</li> <li>■ Procedures / treatment</li> </ul> <p><b>Map Index Location:</b> B-3</p> <p><b>Address:</b></p> <p> Guam Medical Plaza 633 Governor Carlos Camacho Road, Suite 212 Tamuning, Guam 96913</p>	
<b>Island Surgical Center</b>		<b>671-646-0441 / 3</b>
<p><b>Overview:</b></p> <p>Provides specialty surgical services for both children and adults.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Surgical specialty services</li> <li>■ Procedures / treatment</li> <li>■ Pediatrics</li> </ul> <p><b>Map Index Location:</b> B-3</p> <p><b>Address:</b></p> <p> Guam Medical Plaza 633 Governor Carlos Camacho Road, Suite 202 Tamuning, GU 96911</p>	
<b>Latte Stone Cancer Center</b>		<b>671-777-3305</b>
<a href="http://lattestonecancercare.vpweb.com/">http://lattestonecancercare.vpweb.com/</a>		
<p><b>Overview:</b></p> <p>The Latte Stone Cancer Center specializes in oncology and blood disorder diagnosis and treatment options for patients with cancer.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Procedure / treatment</li> </ul> <p><b>Map Index Location:</b> B-3</p> <p><b>Address:</b></p> <p> 241 Farenholt Ave. Suite 201 Tamuning, Guam 96913</p>	

<b>Latte Treatment Center LLC</b> <span style="float: right;">Day: 671-646-5023 / Night: 671-647-5390</span> <a href="http://lattecenter.com/" style="color: white;">http://lattecenter.com/</a>	
<b>Overview:</b> Latte Treatment Center, LLC specializes in providing treatment services for children and youth with severe behavioral and emotional problems that may pose a danger to themselves or others. Latte operates a group home and respite service that is open twenty-four hours a day, seven days a week. The day treatment center operates a flexible schedule to meet the needs of parents and clients.	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>▪ Behavioral counseling</li> </ul> <b>Map Index Location:</b> B-2 <b>Address:</b>  306 Father Duenas Drive Tamuning, Guam 96913
<b>LG &amp; H Internal Medicine Clinic</b> <span style="float: right;">671-475-5544</span>	
<b>Overview:</b> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul> <b>Map Index Location:</b> A-5 <b>Address:</b>  J & G Commercial Plaza Bldg. C, Suite 107 Hagatna, Guam 96910
<b>Little Palm Orthopaedics</b> <span style="float: right;">671-646-6491</span>	
<b>Overview:</b> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul> <b>Map Index Location:</b> B-3 <b>Address:</b>  633 Gov. Carlos Camacho Rd. Suite 212 Guam Medical Plaza Tamuning, Guam 96913
<b>Marianas Footcare Clinic</b> <span style="float: right;">671-649-3338</span>	
<b>Overview:</b> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>▪ Diagnosis / screening</li> <li>▪ Surgical specialty services</li> <li>▪ Medical specialty services</li> <li>▪ Pediatrics</li> <li>▪ Procedures / treatment</li> </ul> <b>Map Index Location:</b> B-4 <b>Address:</b>  122 Tun Jose Toves Way Tamuning, Guam 96913

<b>Marianas Physicians Group</b>		<b>671-647-1830</b>
<p><b>Overview:</b> Provides obstetrics, gynecology, and other services including surgeries.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Internal medicine</li> <li>■ Primary care</li> <li>■ Surgical specialty services</li> <li>■ Medical specialty services</li> <li>■ Obstetrics and gynecology</li> </ul> <p><b>Map Index Location:</b> C-3 <b>Address:</b></p> <p> 472 Chalan San Antonio Tamuning, Guam 96913</p>	
<b>MDX Imaging Center</b>		<b>671-648-6390</b>
<p><b>Overview:</b> Performs diagnostic imaging services including x-ray, ultrasound, CT scans, angiograms, and echocardiography.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ EKG / ECG</li> <li>■ X-Ray</li> <li>■ Ultrasound</li> <li>■ CT scans</li> </ul> <p><b>Map Index Location:</b> C-3 <b>Address:</b></p> <p> 643 Chalan San Antonio, Suite. 109 Tamuning, Guam 96913</p>	
<b>MedFirst Physicians' Group</b>		<b>671-647-4121 / 9893</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> C-3 <b>Address:</b></p> <p> 428 Chalan San Antonio, Suite 101 Tamuning, Guam 96913</p>	

<b>Micronesia Medical and Anesthesia Associates</b>		<b>671-646-8844 /45</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ Diagnosis / screening</li> <li>▪ EKG / ECG</li> </ul> <p><b>Map Index Location:</b> C-4  <b>Address:</b></p> <p> 590 South Marine Corps Drive  Suite 126, ITC Building  Tamuning, Guam 96913</p>	
<b>MPG Pediatrics</b>		<b>671-648-5437</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ Pediatrics</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 396 Chalan San Antonio, Suite 103  Tamuning, Guam 96913</p>	
<b>Olivia Cruz, MD</b>		<b>671-479-6363</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> A-5  <b>Address:</b></p> <p> 227 West Santa Papa  Hagatna, Guam 96910</p>	
<b>Pacific Cardiology Consultants</b>		<b>671-649-4278</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> B-3  <b>Address:</b></p> <p> 633 Gov. Carlos Camacho Rd. Suite 102  Guam Medical Plaza  Tamuning, Guam 96913</p>	

<b>Pacific Hand Surgery Center</b>		<b>671-646-4263</b>
<a href="http://www.pacifichandsurgerycenter.com" style="color: white;">http://www.pacifichandsurgerycenter.com</a>		
<p><b>Overview:</b></p> <p>Specializes in the diagnosis and treatment of carpal tunnel syndrome, hand, wrist, and elbow disorders. Their specialty and expertise in hand surgery on Guam includes full diagnostic and treatment modalities.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ X-Ray</li> <li>■ Surgical specialty services</li> <li>■ Procedures / treatment</li> </ul> <p><b>Map Index Location: B-3</b></p> <p><b>Address:</b></p> <p> 633 Gov. Carlos Camacho Rd. Suite 104 Guam Medical Plaza Tamuning, Guam 96913</p>	
<b>Pacific Healthcare Pharmacy and Clinic</b>		<b>671-649-6831</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Urgent care</li> <li>■ Pharmacy</li> </ul> <p><b>Map Index Location: E-2</b></p> <p><b>Address:</b></p> <p> 1757 Army Drive, Route 16 Harmon, Guam 96929</p>	
<b>Pacific Medical Group</b>		<b>671-649-7232</b>
<a href="http://www.pacificmedicalgroup.org" style="color: white;">http://www.pacificmedicalgroup.org/</a>		
<p><b>Overview:</b></p> <p>Specialties at the clinic include: Internal Medicine, Family Practice, Nephrology (Kidney Disease), Hemodialysis, Peritoneal Dialysis, Hypertension, Pulmonology (Lung Disease), Pulmonary Function Testing, Sleep Disorders, Geriatrics (Elderly Medicine), Wound Care, Medical Weight Management, and Women’s Health.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Internal medicine</li> <li>■ Family practice</li> <li>■ Nephrology</li> <li>■ Weight management</li> <li>■ Specialty services</li> </ul> <p><b>Map Index Location: B-3</b></p> <p><b>Address:</b></p> <p> 633 Gov. Carlos Camacho Rd. Suite 205 Guam Medical Plaza Tamuning, Guam, 96913</p> <p>The clinic accepts Medicare, Staywell, Pacificare, Netcare, CalvoSelectCare, Nanbo, VA, MIP/Medicaid, Tricare, and many off-island insurance plans.</p>	

<b>Pacific Surgical Arts</b>		<b>671-647-0600</b>
<b>Overview:</b> <ul style="list-style-type: none"> <li>No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>No information provided / available.</li> </ul> <b>Map Index Location:</b> B-2 <b>Address:</b> <ul style="list-style-type: none"> <li> 318 Duenas Drive Tamuning, Guam 96913</li> </ul>	
<b>Pacific Urology Consultants, LLC</b>		<b>671-588-1001</b>
<b>Overview:</b> <ul style="list-style-type: none"> <li>No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>No information provided / available.</li> </ul> <b>Map Index Location:</b> B-3 <b>Address:</b> <ul style="list-style-type: none"> <li> 633 Gov. Carlos Camacho Rd. Suite 104 Guam Medical Plaza Tamuning, Guam, 96913</li> </ul>	
<b>Pediatric and Adolescents Clinic</b>		<b>671-647-7337 / 8336</b>
<b>Overview:</b> <ul style="list-style-type: none"> <li>No information provided / available.</li> </ul>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>Pediatrics</li> </ul> <b>Map Index Location:</b> C-3 <b>Address:</b> <ul style="list-style-type: none"> <li> Pemar Place Suite 101 472 Chalan San Antonio Tamuning, Guam 96913</li> </ul>	
<b>PMC Isla Health Systems</b>		<b>671-649-4501</b>
<a href="http://www.pmcguam.com">http:// www.pmcguam.com</a>		
<b>Overview:</b> <p>PMC Isla Health Systems offer a variety of medical services including urgent primary care, family care, and internal medicine. They have been offering Adult and Family Medicine on Guam since 1992, with US trained and Board Certified physicians in Internal Medicine, Pediatrics, Family Practice and Obstetrics/Gynecology.</p>	<b>Programs / Services Provided:</b> <ul style="list-style-type: none"> <li>Primary care</li> <li>Family medicine</li> <li>Obstetrics/Gynecology</li> </ul> <b>Map Index Location:</b> D-3 <b>Address:</b> <ul style="list-style-type: none"> <li> 177-C Chalan Pasaheru Tamuning, Guam 96911</li> </ul>	

<b>Polymedic Clinic</b>		<b>671-637-9661</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ Physicians and surgeons</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Primary care</li> </ul> <p><b>Map Index Location:</b> G-2  <b>Address:</b></p> <p> 172 Buena Vista Avenue  Dededo, Guam 96929</p>	
<b>Primary Pediatric Care</b>		<b>671-646-2181 / 2185 / 671-637-9661</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Pediatrics</li> </ul> <p><b>Map Index Location:</b> G-2  <b>Address:</b></p> <p> 172 Buena Vista Avenue  Dededo, Guam 96929</p>	
<b>Renal Centers of Guam</b>		<b>671-637-3068</b>
<p><b>Overview:</b></p> <p>Provides dialysis services.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Dialysis</li> </ul> <p><b>Map Index Location:</b> E-2  <b>Address:</b></p> <p> 600 Harmon Loop Road, Suite 104  Dededo, Guam 96929</p>	
<b>Sagua Managu</b>		<b>671-647-1417 / 1418</b>
<p><b>Overview:</b></p> <p>Sagua Managu was Guam’s first birthing center that focuses on providing the best birthing experience for mothers. Each of the seven birthing rooms includes an incubator and bassinet, hospital bed for the mother, private bathroom with bathtub, and a medicine cabinet. Other amenities are also featured to give the home-away-from-home feel. Only normal deliveries are possible, and surgical deliveries are not accommodated at the center. In an emergency, patients are taken to Guam Memorial Hospital, just a few minutes away.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Birthing center</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 472 Chalan San Antonio Pemar Place  Tamuning , Guam 96913</p>	

<b>Saint Anthony's Clinic</b> <span style="float: right;">671-646-9696</span>	
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>▪ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ Internal medicine</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 529 Chalan San Antonio                  Tamuning, Guam 96913</p>
<b>Seventh Day Adventist Guam Clinic</b> <span style="float: right;">671-646-8881</span> <a href="http://www.guamsda.com/moxie/wellness/index.shtml" style="color: white;">http://www.guamsda.com/moxie/wellness/index.shtml</a>	
<p><b>Overview:</b></p> <p>Part of the Guam Seventh-Day Adventist Clinic provides health care services to the community of Guam. The clinic also includes a medical department, dental clinic, eye clinic. The wellness center includes a clinical preventionist and nutrition specialist who practices lifestyle and nutritional medicine for the management and reversal of diabetes, cardiovascular diseases, metabolic syndrome, osteoporosis, obesity, women's health, stress related disorders, and other lifestyle related disorders.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ Wellness center and counseling</li> <li>▪ Nutrition services</li> <li>▪ Dental clinic</li> <li>▪ Eye clinic</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 388 Ypao Road                  Tamuning, Guam 96911</p>
<b>Shieh's Clinic</b> <span style="float: right;">671-648-2229</span> <a href="http://shiehclinic.org/Home.php" style="color: white;">http://shiehclinic.org/Home.php</a>	
<p><b>Overview:</b></p> <p>Specializes in primary care for women, offering a wide range of services in addressing all concerns for women in the field of obstetrics and gynecology.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ Primary care for women</li> <li>▪ Obstetrics/Gynecology</li> </ul> <p><b>Map Index Location:</b> C-3  <b>Address:</b></p> <p> 643 Chalan San Antonio, Suite 108                  Tamuning, Guam 96913</p>
<b>The Doctor's Clinic</b> <span style="float: right;">671-300-0825 / 0828</span>	
<p><b>Overview:</b></p> <p>The clinic provides a range of primary care services through both Allopathic &amp; Osteopathic Physicians.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>▪ Internal medicine</li> <li>▪ Family medicine</li> <li>▪ Podiatric medicine and surgery services</li> </ul> <p><b>Map Index Location:</b> B-2  <b>Address:</b></p> <p> 851 Governor Carlos Camacho Road                  Tamuning, Guam 96913</p>

<b>The Neurology Clinic</b>		<b>671-646-6463</b>
<p><b>Overview:</b> The clinic has board certified physicians that specialize in pediatric and adult neurology.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Neurological services</li> </ul> <p><b>Map Index Location:</b> B-3 <b>Address:</b></p> <p> 241 Farenholt Ave. Ste. 102 Oka Bldg. Tamuning, Guam 96913</p>	
<b>Tumon Kidney Center</b>		<b>671-646-3773</b>
<p><b>Overview:</b> Provides dialysis services.</p>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Hemodialysis</li> </ul> <p><b>Map Index Location:</b> E-1 <b>Address:</b></p> <p>1406 North Marine Corp Drive Suite A Upper Tumon, Guam 96913</p>	
<b>Tumon Medical Office</b>		<b>671-649-5052</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ Family medicine</li> </ul> <p><b>Map Index Location:</b> E-1 <b>Address:</b></p> <p> 125 Carlos Lane Carlos Heights, Upper Tumon, Guam 96913</p>	
<b>Wen Yen Chen, MD</b>		<b>671-637-8112</b>
<p><b>Overview:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul>	<p><b>Programs / Services Provided:</b></p> <ul style="list-style-type: none"> <li>■ No information provided / available.</li> </ul> <p><b>Map Index Location:</b> F-2 <b>Address:</b></p> <p> 330 West Marine Corps Drive Dededo, Guam 96929</p>	

## Private Provider Survey

As part of the data gathering phase of the Guam Medical Delivery Plan, a survey was designed, developed and submitted to all identified relevant health providers on the island to obtain a snapshot of existing private providers, facilities, services, available equipment, types and number of medical professionals and access to care. Due to the sensitive nature in dealing with health related issues and privacy, an outreach effort to encourage health providers to help design the survey and to complete the survey was established. Outreach included individual meetings to review the purpose and focus of the survey. In addition to explaining how the information will be used and providing background information on the Medical Delivery Plan.

The total number of private providers that were identified as relevant to the purposes of the Delivery Plan on Guam was 58. In addition, the Guam Medical City Hospital is currently under construction and will become the island's private hospital. As part of the outreach process, 45 of the health care providers were visited in person. Due to scheduling and time constraints of the medical professionals, the 13 remaining healthcare professional were not met with in-person. The remaining providers that were not contacted in-person were contacted via telephone or email. These same means of communications were also used for follow-up calls or emails to providers to encourage filling-out and submitting the surveys.

The Guam Medical Provider Survey for private providers was composed of 34 questions. The survey was developed to be filled-out in a variety of convenient ways. The survey was delivered in hard copy form to each provider that was visited and the survey could either be mailed, emailed, or faxed back once completed. An electronic PDF version was sent to all providers that provided a valid email, which then could be filled-out electronically and emailed back. The survey was also prepared in an online format using SurveyMonkey, in which participants could complete and submit electronically. Due to SurveyMonkey technical constraints causing two questions to be divided into two parts, the online survey contained 36 questions rather than 34. Respondents to the survey, most commonly used SurveyMonkey. Paper surveys returned by fax and email were input into SurveyMonkey to more easily analyze the results.

It is important to note, the survey was not a random sample designed survey to provide statistical significance. Rather, the discrete population was purposefully identified and targeted for the goal of receiving qualitative data assessing existing conditions and / or issues for the basis of further study. However, it is important to recognize of the 58 medical providers who received a survey, 22 completed and returned the survey, representing approximately 38 percent response rate which far exceeds a typical 5 to 8 percent mail in rate. A summary of the responses to each survey question are provided on the following pages.

A copy of the Private Provider Survey, as well as a letter from the Office of the Governor that accompanied the survey and explained its purpose can be found in Appendix B.

### *Guam Regional Medical City Hospital*



*Guam Regional Medical City Design Plan*

Since the Guam Regional Medical City (GRMC) hospital is soon to become the island's first and only private hospital and will include medical professionals from a wide range of medical specialties, the hospital is discussed here separately from the key findings and overall survey results.

Currently, Guam Memorial Hospital (GMH) is the only civilian hospital facility on Guam. To complement the Department of Defense investment associated with the military buildup and provide for adequate healthcare delivery for the civilian population, additional private healthcare facilities are needed on the Island.

GRMC is currently under construction and the first phase is anticipated to open in June of 2014. Once complete, the first phase of GRMC will be a 130-bed tertiary level hospital that will offer world-class health services tailored to the needs of the island and the rest of the Micronesia Region. GRMC will be operated by The Medical City (TMC), a Joint Commission-accredited Philippines healthcare organization. TMC has over 40 years of experience in healthcare facility operation and administration and has a long history of providing superior operational and administrative leadership to

healthcare facilities in the Pacific. Services offered will be aligned with TMC's centers of excellence and the region's specific health profile and will include:

- Wellness,
- Cardiology,
- Oncology,
- Endocrinology,
- Pulmonology,
- Neurology,
- Orthopedics,
- Ophthalmology,
- Ear, Nose and Throat,
- General Surgery,
- OB-Gynecology (including high-risk OB),
- Anesthesia,
- Pediatrics, including Neonatology,
- Infectious Disease,
- Emergency Medicine,
- Ambulance Services,
- Laboratory,
- Radiology,
- Physical Therapy, and
- Pharmacy.

The facility will be a six-story building totaling 267,000 square feet and located on an 8.5-acre site in the Village of Dededo at the corner of Marine Corps Drive and Route 3. The hospital's location in Guam's most populated village (Dededo) and in the north-central area of the island will afford greater access to the facility. In its evaluation, the Joint Commission awarded The Medical City perfect scores in the areas of Access to Care, Continuity of Care, Quality Improvement, and Patient Safety.

GRMC will feature a state-of-the-art facility that operates 130 acute care beds, 15 dedicated emergency beds, 15 intensive care rooms, 8 surgery suites, a birthing center, and a neonatal intensive care unit. The birthing center will have 20 intensive care beds, 18 bassinets, and six incubators. Cancer treatment, a state-of-the-art Emergency Room and Operating Room Suite, medical imaging, cardiology and ophthalmology clinics, and on-site laboratory facilities will also be included. A second

phase is under consideration and will add up to 100 patient rooms and office space for more specialists to provide additional capabilities on-island.

GRMC's enhanced design and plan will eventually allow for a hospital expansion of a maximum capacity of 350 beds.

### **Medical Equipment**

Although specific details regarding the equipment inventory for the hospital have not been finalized, the hospital will have some state-of-the-art equipment that does not currently exist on Guam. The hospital will also be equipped with an electronic medical records system that will be linked with public health clinics and GMH.

These additional capabilities will allow Guam residents and visitors to have access to cutting-edge technologies that will improve the quality of life and healthcare provided on Guam. In addition to GRMC, the site is being designed as true medical campus and will include a Medical Arts Building collocated with the hospital, providing physicians' with opportunities to establish clinics and office practices capitalizing on the proximate location of the new hospital.

### **Medical Professionals**

Staffing data was not made available as part of this data collection; however, it is anticipated that the new hospital will have approximately 400 resident doctors, nurses, and support staff, excluding medical consultants. The recruitment process started in 2011 and includes reaching out to US Board Certified physicians practicing on the mainland and either born and raised on Guam or who have ties to Guam. Relationships have been established with Medical Schools including the University of Pittsburgh Medical School, the University of Hawaii Medical School, Stanford University (California), Loma Linda University (California), Catholic Health Care West, Adventist Healthcare System and Associations of Guam and Philippine communities in California that have offered to assist with reaching out to medical professionals to return home. GRMC is targeting physicians in the United States who have connections to Guam as well as new medical school graduates who want to take advantage of the hospital's loan-forgiveness program. The loan forgiveness program requires that a medical professional practice for five years on Guam for their loan to be forgiven.

There is also a large pool of US Board Certified Physicians practicing in the Philippines, Japan, and Korea that are eligible for licensure on Guam and that the GRMC is targeting for staffing. Relationships have been established for the rotation of US Board Certified Japanese and Korean Doctors for a medical tourism component.

### *Issues and Challenges*

Since the private hospital is currently under construction and medical care has not yet begun, it is too soon to accurately assess and identify issues in service. However, its location will not change the current problems related to hospital accessibility that GMH also experiences due to the difficulty of travelling from the southern portion of Guam due to the distance and the smaller, curvier roads that lead to the north.

In addition, the new hospital will not provide much needed transplant services. According to statements made by TMC representatives, certain services such as transplantation would be virtually impossible to support financially since medical teams and associated equipment, medication and related processes are extremely expensive and specialized and Guam's population could not support such a service. Thus there will still be a need for some off-island care.

## Key Survey Findings

- Typical range of hours of operation for medical facilities: Monday through Friday 8 a.m. to 6 p.m.
- Two of the providers (nine percent) are open 24 hours a day, seven days a week.
- 48% self-identified as a solo, medical practitioner
- All respondents are accepting new patients
- Same day appointments are unlikely
- A routine medical appointment may generally be accommodated within one week
- 60% submit claims electronically
- 15% do not use an electronic medical record (EMR) or electronic health record system (EHR).
- Several providers indicated poor internet connectivity as a reason for not submitting electronic claims
- Interviews of providers indicated a need for medical staff, however survey is not conclusive
- Prevalent pieces of equipment at facilities ultrasound (6) and X-ray (5)
- Indicated as having at least one piece of equipment: CT scanner, MRI, dialysis
- Several providers use equipment at other provider locations for medical services and tests
- Worthy of further investigation is patients older than 65 years may be underserved
- Of the 15 respondents to the question, 5 indicated that more than 71 of their payments come from private insurance

- Medicare, Medicaid, MIP, Tri-Care, and cash / out of pocket payments were on the lower end of the spectrum, with a majority of these payment types only accounting for less than 11 percent of the payments.
- In terms of practice patient portfolio, off island patients, military personnel and dependents are a small minority
- Most commonly mentioned restrictions or constraints on providing services were in regards to insurance coverage or a patient's ability to pay for care and shortages in staff or certain types of specialties.

### Questions 1: General Provider Information; and 2: Facility Contact Information

The first two questions of the survey were to identify which provider was submitting a response, and to gather general contact information for each provider. The results of the survey responses were analyzed in an aggregate form, and no individual provider information is presented in the following discussion.

### Question 3: Hours of Operation

Respondents were asked to provide their daily hours of operation. The majority of respondents open their practice Monday through Friday between the hours of 8:00 and 9:00 am and close between 5:00 pm and 6:00 pm. Eight out of the 22 respondents (36 percent) indicated they are closed on Saturdays, and 18 respondents (82 percent) are closed on Sundays. Two of the providers (nine percent) are open 24 hours a day, seven days a week. Table 3-1 shows the hours operation by day of the week for the respondents.

Table 3-1. Responses to Hours of Operation for Private Providers

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0700-1300	-	-	-	-	-	1	-
0700-1800	1	1	1	1	1	-	-
0800-0900	-	-	-	-	-	1	-
0800-1100	-	-	-	-	-	1	-
0800-1200	-	-	-	1	-	-	-
0800-1300	-	-	-	-	-	1	-

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0800-1600	3	3	3	2	3	-	-
0800-1700	5	7	5	6	5	1	1
0800-1800	1	1	1	1	1	-	-
0800-2000	1	1	1	1	1	1	-
0830-1700	-	1	-	1	-	-	-
0830-1730	1	1	1	1	1	-	-
0830-1800	1	1	1	1	1	-	-
0900-1200	-	-	-	-	-	1	-
0900-1230	-	-	-	-	-	1	-
0900-1300	-	-	-	-	-	2	-
0900-1500	-	-	-	-	-	1	-
0900-1600	1	1	1	1	1	-	-
0900-1700	3	1	2	2	2	-	-
0900-1730	1	1	-	1	1	-	-
0900-1800	1	1	1	1	1	1	-
1000-1800	-	-	-	-	-	-	1
1300-1700	-	-	1	-	1	-	-
1300-1730	-	-	1	-	-	-	-
1400-1800	-	-	-	-	1	-	-
Closed	1	-	1	-	-	8	18
All Day	2	2	2	2	2	2	2

**Question 4: When your facility is closed, which of the following applies for after-hour calls (for non-emergency calls)? (Check all that apply)**

The response rate to Question 4 was 17 out of 22 participants. Of the 17 respondents, 11 (65 percent) direct patients to call back during regular office hours; six providers (35 percent) have an answering service that screens calls; three providers (18 percent) direct patients to another facility; and three (18 percent) have a standard physician that can be on call.

Six respondents (35 percent) answered “other”. Of these, three have a voicemail system in place and will return calls the next business day; one respondent provided the doctor’s cell phone number; one facility is open 24 / 7; and, one directs patients to go to the Guam Memorial Hospital Emergency Room. Figure 3-2 identifies the responses to Question 4, excluding the responses for “other”.

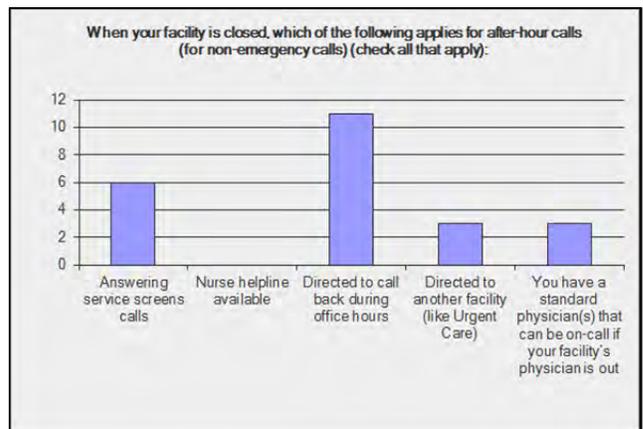


Figure 3-2. Handling After-Hour Calls

**Question 5: During the previous week (the week before you completed this survey), how many patient visits / encounters did you have at this location?**

Question 5 seeks to identify current patient loads for each facility. Responses varied widely for this question, based on healthcare practice, types of services provided, the number of staff, and the size of the facilities.

Nineteen out of twenty-two participants (86 percent) answered this question. The answers ranged from nine patients in the previous week for the smaller providers to 519 patients for the larger providers. When all responses were aggregated and averaged over the number of providers, an average of 158 patients were seen per provider the previous week basis. This is not necessarily a fair assessment of the situation, as nine (47 percent) of respondents had less than 100 patients the previous week and two (11 percent) of respondents had greater than 500 patients.

**Question 6: Is this facility operated as a solo practice?**

Question 6 sought to determine if prevalence of solo practitioners existed on Guam.

Twenty-one participants responded to the question, and the results showed almost an even distribution between solo practice providers and multiple practice providers. Ten respondents (48 percent) identified themselves as solo practice, while 11 (52 percent) answered that they are not solo. The respondents that answered that they are a solo practice were asked to skip to Question 8, while those that answered no were instructed to answer Question 7. However, some respondents that answered yes still answered Question 7. Figure 3-3 shows the breakdown of responses.

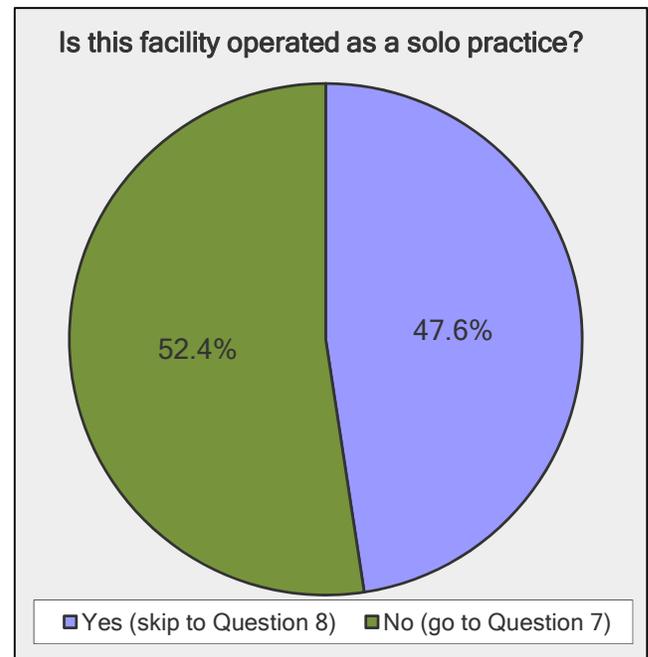


Figure 3-3. Is This Facility a Solo Practice?

**Question 7: Is this a single-specialty or multi-specialty group practice?**

Seventeen of the 22 participants (77 percent) answered Question 7. Eleven (65 percent) responded that their facility was a single-specialty practice, while the remaining six (35 percent) are multi-specialty. Figure 3-4 shows the breakdown of responses.

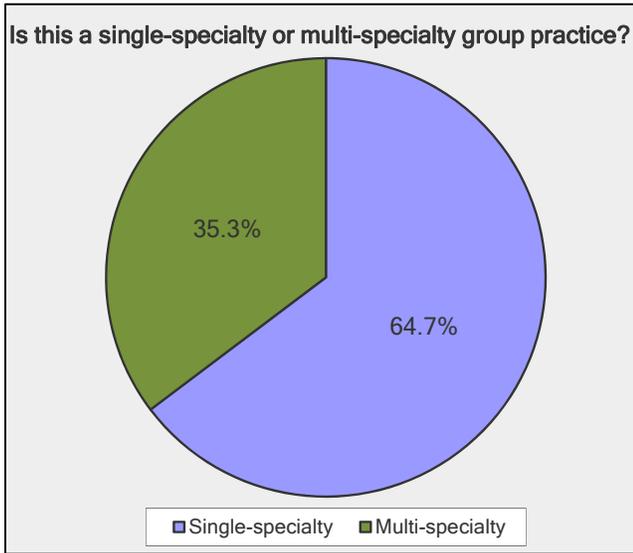


Figure 3-4. Type of Practice Specialty

**Question 8: Are you currently accepting "new" patients?**

All of the survey participants responded to Question 8, and each respondent answered that they are currently accepting new patients.

**Question 9: Who owns the practice? (Check one type)**

All of the participants in the survey responded to Question 9. Since the survey was developed for private providers, none of the respondents answered that the practice was owned by a community health center, hospital, federal entity, HMO, or medical / academic health center. Twenty of the respondents (91 percent) answered that their practice is owned by a physician or physician group, and two (nine percent) answered that they are owned by another health care corporation, one of which was identified as "private individuals". Figure 3-5 shows the breakdown of ownership of the participant providers.

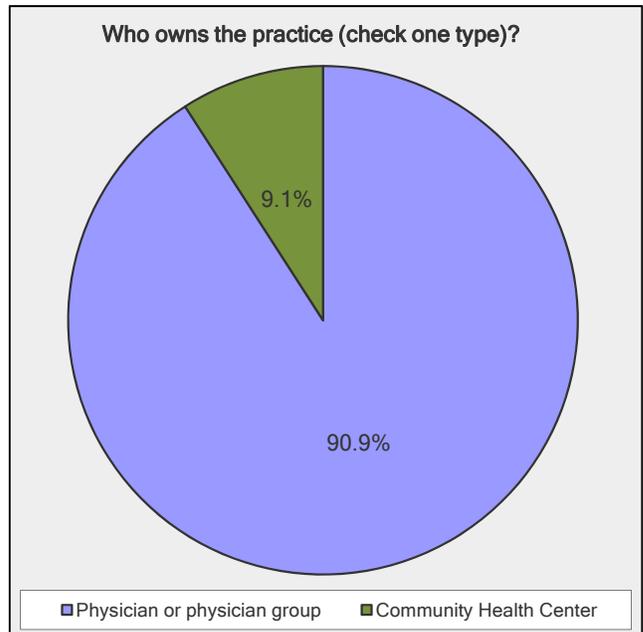


Figure 3-5. Ownership of the Provider

**Question 10: Looking at the list below, choose ALL of the setting types that describe this facility.**

All survey participants responded to Question 10. This question sought general information on the type of facility, its conditions and capabilities, and some general types of services that it offers.

Twenty respondents (91 percent) indicated that they are a private solo or group practice; 11 (50 percent) answered they are a freestanding clinic / surgicenter; two

(nine percent) indicated they are a non-federal government clinic; one (five percent) answered they are a health maintenance organization or other prepaid practice; one (five percent) indicated they are a hospital emergency department; one responded they are a hospital outpatient department; one (five percent) responded they provide mental health services; and, one (five percent) indicated they provide family planning services. Figure 3-6 shows the responses to each category.

Looking at the list below, choose ALL of the setting types that describe this facility.

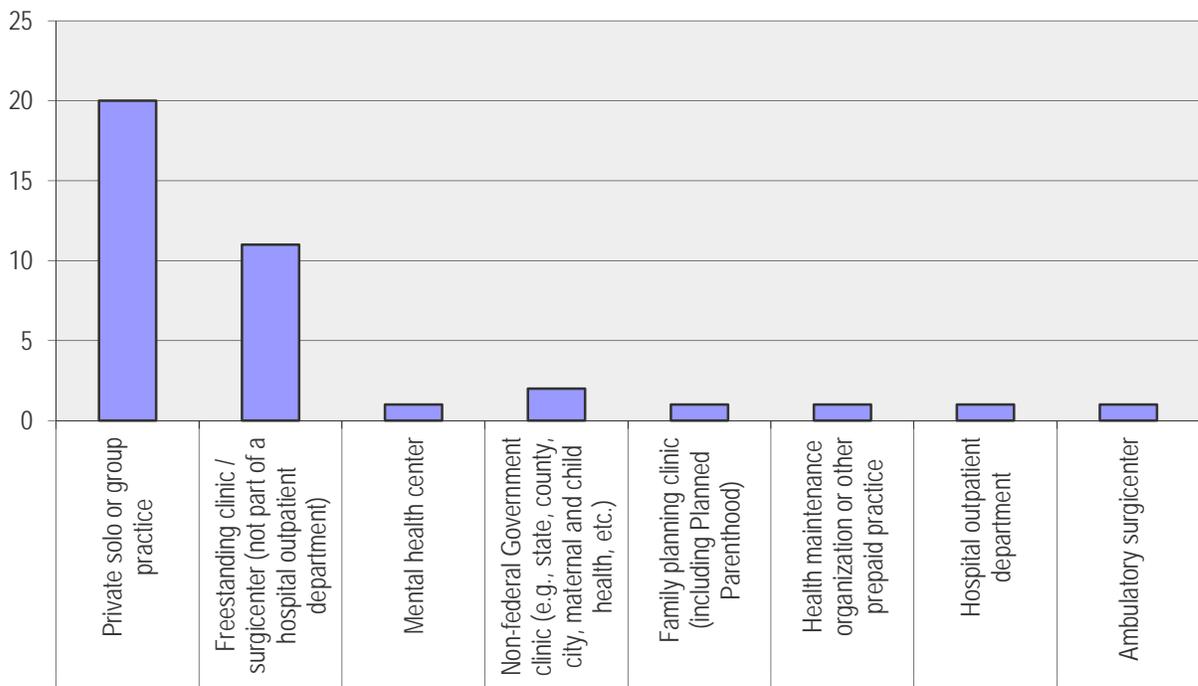


Figure 3-6. Type of Facility

**Question 11: Roughly, what percent of your daily visits are same-day appointments?**

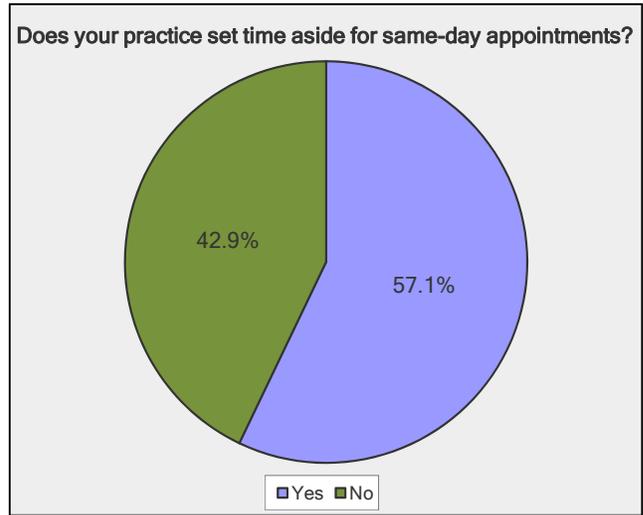
Twenty-one (95 percent) of the survey participants responded to Question 11. Thirteen of the respondents (62 percent) answered that between zero to ten percent of their daily visits are same-day appointments. This indicates a low amount of same-day appointments available for walk-in patients at private providers. Four of the respondents (19 percent) reported that between 50-60 percent of their daily visits are same-day appointments. Two of the respondents (10 percent) indicated that 80 percent of their daily visits are same-day appointments. Of the two remaining respondents, one answered that 30 percent of their daily visits are same-day and the other one responded that 100 percent of their daily visits are same-day appointments. Table 3-2 shows the breakdown of results.

**Table 3-2. Percent of Daily Visits that are Same-Day Appointments**

Percent Same-Day Appointments	Number of Responses
–	2
3	2
5	6
10	3
30	1
50	3
50-60	1
80	2
100	1

**Question 12: Does your practice set time aside for same-day appointments?**

Twenty-one (95 percent) answered Question 12. Of the respondents, 12 (57 percent) answered that they do set time aside for same-day appointments and the remaining nine (43 percent) indicated that they do not set time aside. These responses are a little different than the responses to Question 11, in which only two respondents reported that zero percent of their daily visits are same-day appointments. These results indicate that there is a shortage of providers that set time aside for same-day appointments. Figure 3-7 shows the breakdown of responses.



**Figure 3-7. Same-Day Appointment Availability**

**Question 13: On average, about how long does it take to get an appointment for a routine medical exam?**

All of the survey participants responded to Question 22. Four of the respondents (18 percent) answered that they do not provide routine medical examinations. Of the providers that do perform medical exams, five (23 percent) responded that appointments are generally scheduled within one to two days, six (27 percent) answered they schedule within one week, three (14 percent) schedule within one to two weeks, three (14 percent) schedule within three to four weeks, and one (5 percent) indicated it generally takes one to two months to schedule an appointment. With 50 percent of respondents answering that appointments are usually scheduled in less than a week, this indicates a fairly good turnaround for scheduling appointments in a timely manner. Figure 3-8 shows the breakdown of responses to Question 13.

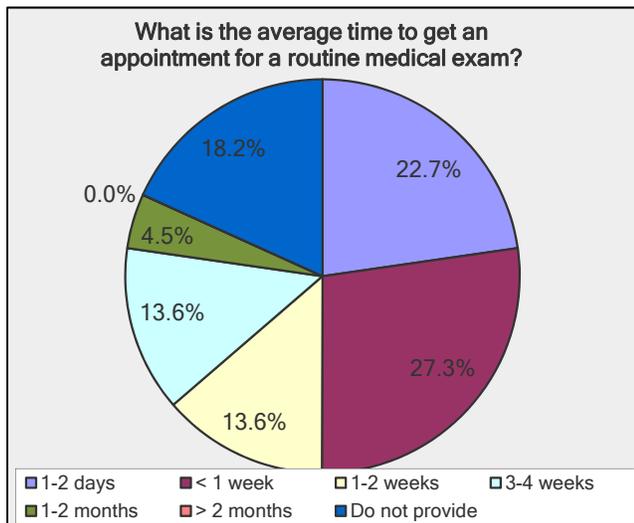


Figure 3-8. Average Timeframe to Get an Appointment

**Question 14: Do practitioners from this facility directly provide any in-home care services?**

All of the survey participants responded to Question 22. However, only two respondents (nine percent) answered that they provide any in-home services, leaving 20 respondents (91 percent) as not providing any in-home services. This sample indicates that in-home services are in short supply for Guam residents. Figure 3-9 shows the breakdown of responses.

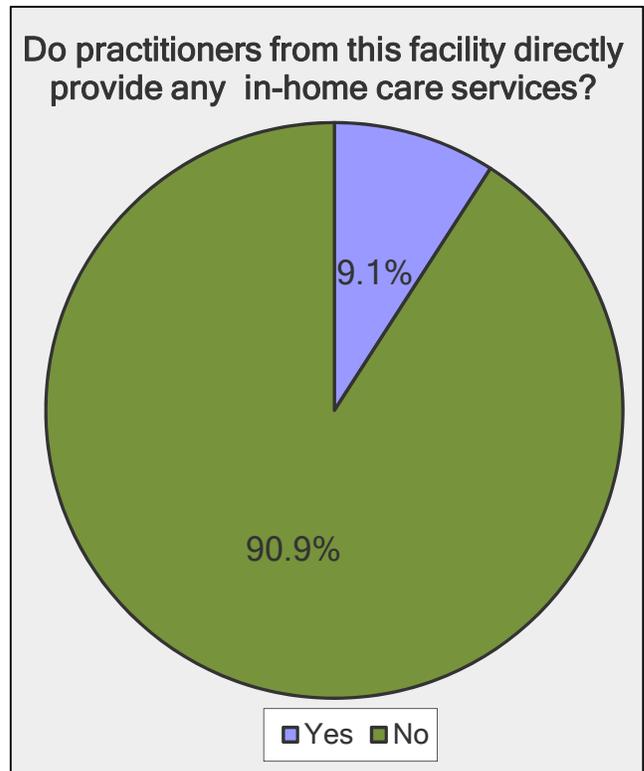


Figure 3-9. Availability of In-Home Care Services

**Question 15: Do practitioners from this facility perform any internet / e-mail consults?**

All of the survey participants responded to Question 15. Similar to Question 14, only two respondents (nine percent) identified that they offer internet or email consultations and the remaining 20 (91 percent) do not. One reason for this could be a liability concern for providers in terms of not seeing the patient face-to-face in order to make the best assessment of their condition or ailment. Figure 3-10 shows the breakdown of responses for Question 15.

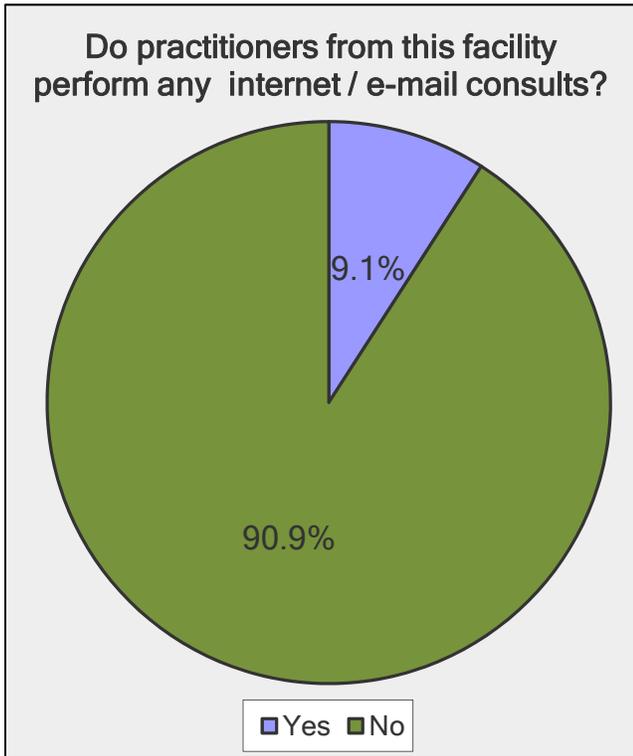


Figure 3-10. Availability of Electronic Consultations

**Question 16: Does this facility have the ability to perform any of the following on site? (Check all that apply)**

Only 11 (50 percent) of the survey respondents answered Question 16. It is assumed that those who did not answer do not perform any of the services on site. Of the 11 respondents that answered the question, nine (82 percent) of them perform EKG / ECG, seven (64 percent) perform X-ray services, five (46 percent)

perform ultrasounds, four (36 percent) perform spirometry, and four (36 percent) do lab testing. The results of the 11 respondents' answers are shown on Figure 3-11.

Does this facility have the ability to perform any of the following on site?  
(Check all that apply)

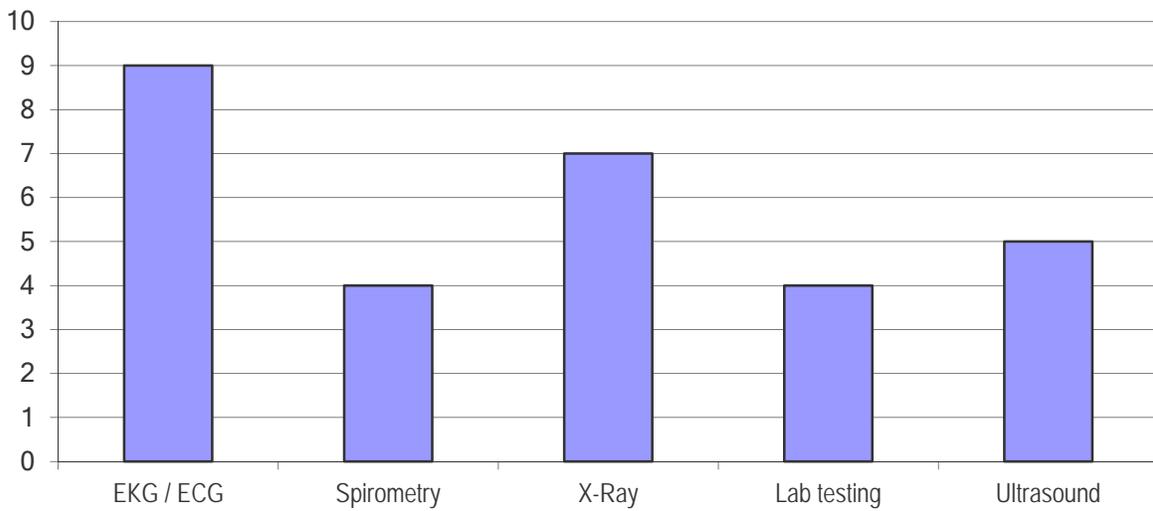


Figure 3-11. Availability of Specialty Diagnostics

**Question 17: Please check all of the following services that you offer.**

All but one of the survey participants responded to Question 17. This question allowed participants to fill out multiple responses based on the various services they offer. The most commonly offered service was procedures and treatments, with 16 respondents (76 percent) offering these services. Other services that are offered are: 12 (57 percent) respondents offer diagnosis / screening, 10 (48 percent) offer surgical specialty services, nine (43 percent) offer medical specialty services, nine (43 percent) offer pediatric services, four (19 percent) offer emergency services, four (19 percent) offer laboratory services, and one (five percent) offer mental health services. Additionally, 12 respondents answered that they offer other specialty services. The other specialty services that were identified are as follows:

- Chemotherapy,
- Circumcision,
- Endocrinology and infectious disease,
- Hand surgery and microsurgical reconstruction

- IR radiology
- Laser skin treatment, laser hair removal, and cosmetic skin services,
- MDX performs diagnostic biopsies, ultrasound-guided, paracentesis, thoracentesis,
- Obstetrics, gynecology services including surgeries,
- Orthopaedics (surgical procedures, cast applications, etc.),
- Podiatric,
- Residential and day treatment for mental health; children and adults, and
- Sleep medicine.

Figure 3-12 shows the number of respondents that offer each type of service (excluding the other specialty services).

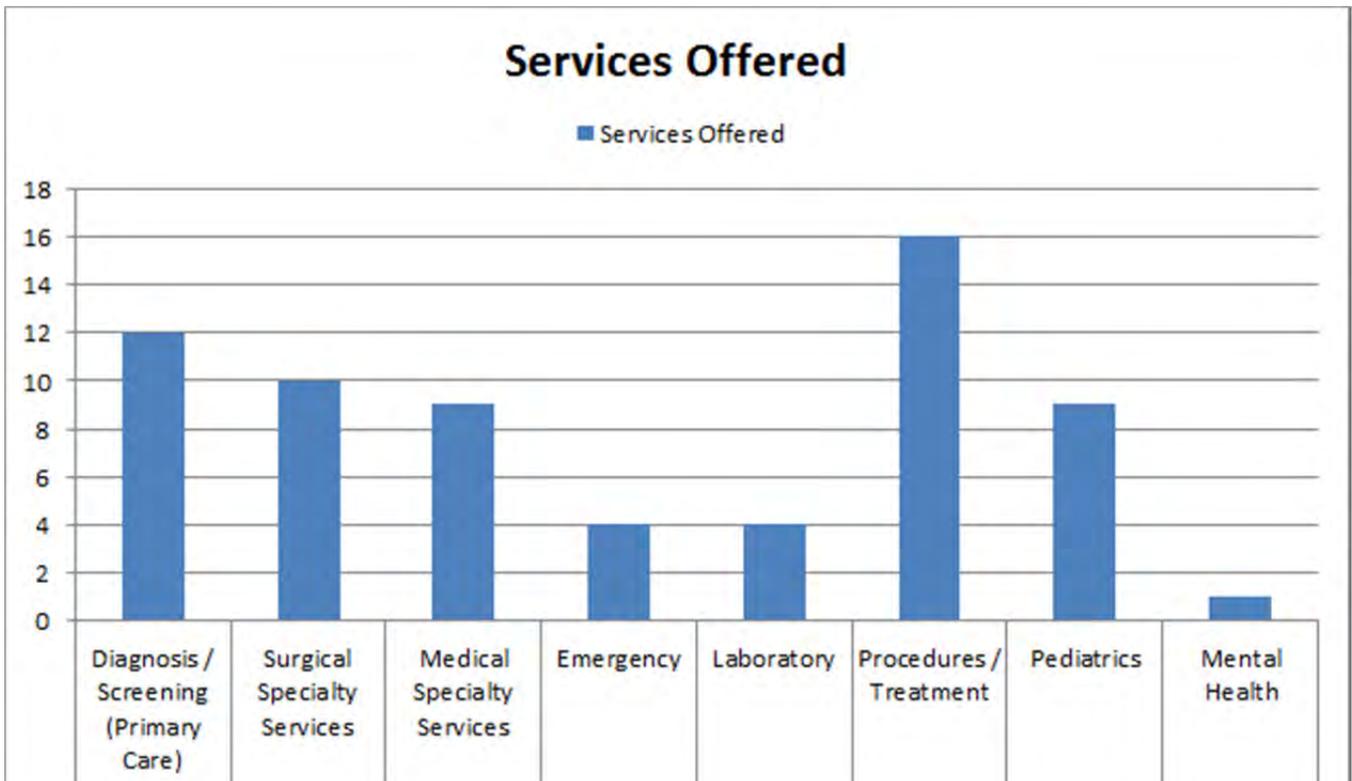


Figure 3-12. Types of Services Available

**Question 18: Please identify the estimated number of patients for each service in the week prior to the date of this survey. Note: a single patient may have more than one service per visit.**

Question 18 was a follow-up to Question 17. However, not all of the respondents that answered Question 17 filled out a response for Question 18. Only 15 survey participants answered Question 18. One reason for this may be that this type of information is not tracked or recorded by all providers or provider may not want information divulged to other practices. Table 3-3 provides the numbers of patients served by the responding providers. Each row contains the responses from one individual provider for the number of patients they saw for each type of service. A percentage of the total number of patients for each service is provided as well.

According to the responses, the largest number of services is provided for diagnostic / screening. In total, the number of patients receiving diagnostic / screening services in the prior week was an estimated 726. Procedures / treatments and medical specialty services came in close as second and third, with a total of 477 and 476 patients receiving these services, respectively. These were then followed by surgical specialty services and pediatric services, with 259 and 239 patients, respectively. Laboratory had a total of 135 patients, but this was only from two individual providers. Mental health and emergency services saw the lowest number of patients, at 15 and one, respectively, and each were only identified by one individual provider as being offered, despite four providers saying they offer emergency services in Question 17.

**Table 3-3. Estimated Number of Patients for Each Service in the Prior Week**

Diagnostic / Screening	Surgical Specialty Services	Medical Specialty Services	Emergency	Laboratory	Procedures / Treatment	Pediatrics	Mental Health	Total
-	4% (5)	62% (80)	-	-	24% (32)	9% (12)	-	129
-	-	100% (25)	-	-	-	-	-	25
45% (35)	-	-	-	45% (35)	10% (8)	-	-	78
13% (40)	2% (7)	79% (249)	-	-	7% (21)	-	-	317
-	100% (65)	-	-	-	-	-	-	65
-	83% (100)	-	-	-	17% (20)	-	-	120
-	90% (80)	-	-	-	6% (59)	4% (4)	-	89
19% (60)	-	-	-	-	76% (240)	5% (15)	-	315
-	-	50% (9)	-	-	50% (9)	-	-	18
-	5% (2)	90% (38)	-	-	5% (2)	-	-	42
50% (100)	-	-	-	-	-	50% (100)	-	200
75% (90)	-	17% (20)	-	-	8% (10)	-	-	120
57% (400)	-	-	-	14% (100)	14% (100)	14% (100)	-	700
2% (1)	-	27% (15)	2% (1)	-	27% (15)	15% (8)	27% (15)	55
-	-	73% (40)	-	-	27% (15)	-	-	55

***Question 19: What is the overall square footage of this facility?***

Only 15 of the survey participants answered Question 19. Sizes of the respondent provider facilities ranged from 1,500 to 12,000 square feet. The majority of the facilities were on the smaller side of the spectrum. Five of the facilities (33 percent) ranged in size from 1,500 to 1,800 square feet and six (40 percent) ranged in size from 3,000 to 4,000 square feet. On the larger size, one facility was 6,900 square feet, one was 6,970 square feet, one was 10,000 square feet, and one was 12,000 square feet.

***Question 20: Is there room to expand at your location?***

Twenty of the survey participants responded to Question 20. The responses were split 50/50, with 10 respondents answering that they do have room to expand, and 10 indicating they do not have room. Many of the facilities are located in building complexes and do not have room to expand, unless they were to occupy another suite within the building.

**Question 21: What is the number of key work / patient areas your facility has?**

Question 21 was the first part of a two-part question, with Question 22 being a follow-up question to gauge the adequacy of the existing work and patient areas.

Nineteen (86 percent) of the survey participants answered Question 22. Table 3-4 shows the responses from participants that answered Question 21.

**Table 3-4. Number of Key Work / Patient Areas at Facilities**

Exam / Treatment Rooms	Physician Offices	Patient Waiting Areas (Number of Seats)	Recovery / In-Patient Beds	X-ray Rooms	Medical Supply Storage	Pharmacy
14	6	95	-	1	7	1
4	2	20	-	-	1	-
7	-	15	-	-	4	-
4	1	20	2	-	2	-
7	2	20	-	-	1	-
2	1	30	-	-	1	1
8	5	25	4	1	2	-
5	3	1	-	-	-	-
3	2	1	-	-	1	-
4	2	20	-	1	1	-
17	5	60	-	3	4	-
4	2	1	-	-	1	-
2	1	5	-	-	2	-
3	1	10	-	-	1	-
2	1	20	-	-	3	-
5	3	20	-	-	-	-
11	1	20	-	-	-	-
2	2	-	26	-	2	-
2	2	1	1	-	1	1

**Question 22: Is the number of key work / patient areas adequate for current patient loads?**

Question 22 is a follow-up to Question 21. Nineteen of the survey participants responded to Question 22. In general, the number of key work and patient areas were identified to be adequate to support current patient loads at the individual facilities. Two facilities indicated that the number of seats in the patient waiting areas is

inadequate, one facility identified an inadequate amount of medical supply storage, and one facility reported an inadequacy in its pharmacy space. Figure 3-13 shows responses in terms of adequacy of spaces at each facility.

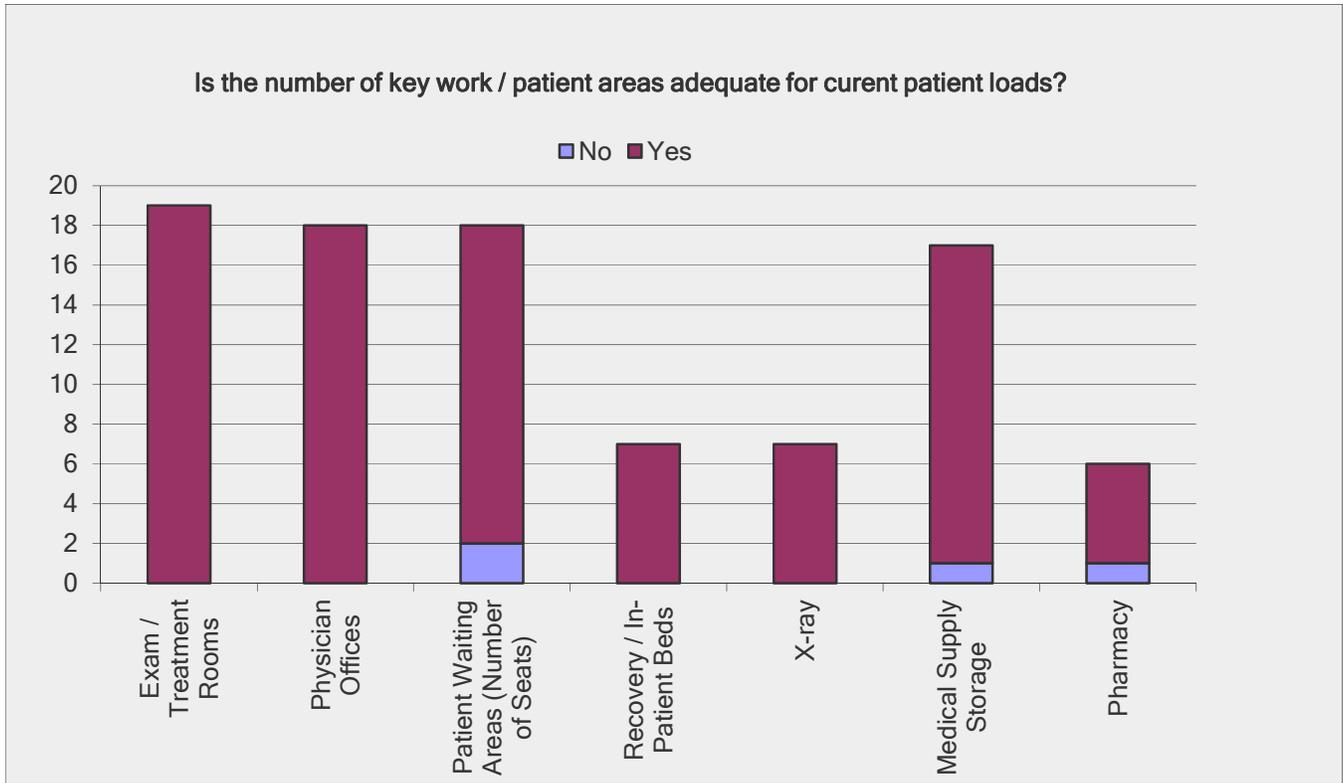


Figure 3-13. Adequacy of Key Work / Patient Areas

**Question 23: Please briefly describe any issues / impediments to providing medical services at your facility (i.e., size, location), as well as any opportunities to expand and / or enhance services.**

Ten (45 percent) of the survey participants responded to Question 23. A non-response could be an indication that there are no major issues or concerns at the facility that impact providing services to patient. Three of the responses indicated that there are no current issues that impact services.

This question was an open-ended question that required a written response. The following are the responses received:

- Size (land locked), limited parking.
- Shrinking number of providers limits our capacity.
- Delayed or nonpayment from MIP / DOC / self-pay; we don't turn away patients.
- Insurance companies facilitating patients to go to the Philippines for medical care by giving incentives of waiving copays and deductibles all the while being able to claim tax exempt status on Guam for GRT & withholding. Moreover, the health insurance companies send administrative tasks to be done in the Philippines to reduce costs although the law to allow their tax exempt status was meant to create jobs on Guam and circulate the money on Island for the benefit of the Guam local economy.
- More surgeons needed; better reimbursements.
- If we can receive consistent payments from MIP / Medicaid patients, the revenues can help expand, as well as keep up with the much needed demand in medical care for those with diabetes.
- No physical issues impede our services.
- None.
- None.

**Question 24: Does your facility submit any claims electronically?**

Question 24 was one of the questions aimed at determining the prevalence of electronic records keeping and usage for providers on Guam. Twenty-one (95 percent) of the survey participants answered this question. Thirteen (62 percent) of the respondents identified that they do utilize a degree of electronic claims submittal, while the other eight (38 percent) do not. Several of the providers that were visited expressed issues with poor internet connectivity, which could be one reason for not submitting electronic claims. Figure 3-14 shows the breakdown of responses to Question 24.

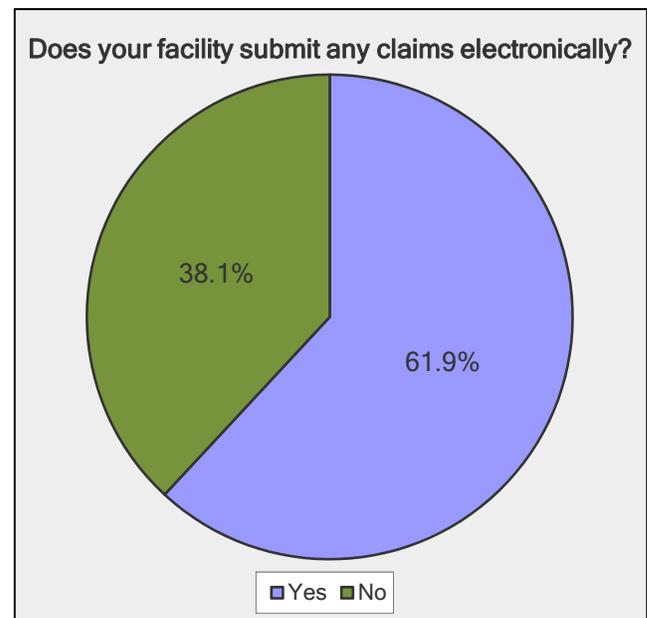


Figure 3-14. Electronic Claims Submittal

**Question 25: Does your practice use an electronic medical record (EMR) or electronic health record (EHR) system? Do not include billing record systems.**

Question 25 was a follow-up question for the prevalence of electronic records keeping. Twenty (91 percent) of the survey participants responded to this question. Of the respondents, three (15 percent) answered that they use completely electronic billing records systems, eight (40 percent) answered that they use partial paper and partial electronic systems, and nine (45 percent) indicated that they do not use electronic billing records. Respondents that answered that they do not use any electronic systems were asked to skip to Question 28. Figure 3-15 illustrates the breakdown of responses to Question 25.

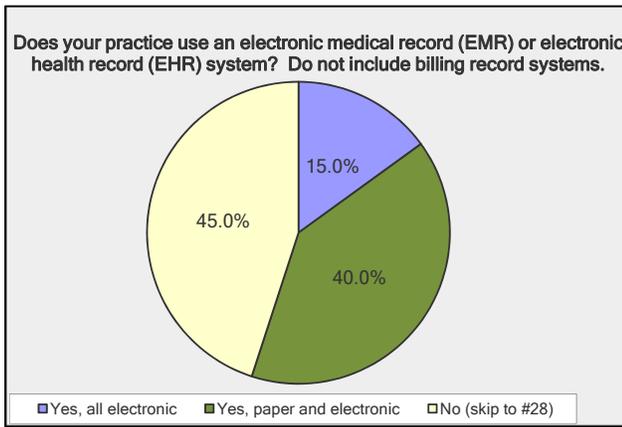


Figure 3-15. Usage of Electronic Records

**Question 26: Does your facility exchange patient clinical summaries electronically with any other providers?**

Continuing with electronic records utilization, Question 26 looked at electronic linkages between providers. Although only 11 providers answered yes to Question 25, there were 14 that answered Question 26. Of these 14, four (29 percent) respondents indicated that they both send and receive patient summaries electronically, one (seven percent) respondent answered that they only send patient summaries, but do not receive, and nine (64 percent) responded that they do not send or receive electronic claims between other providers. Figure 3-16 shows the breakdown of responses to Question 26.

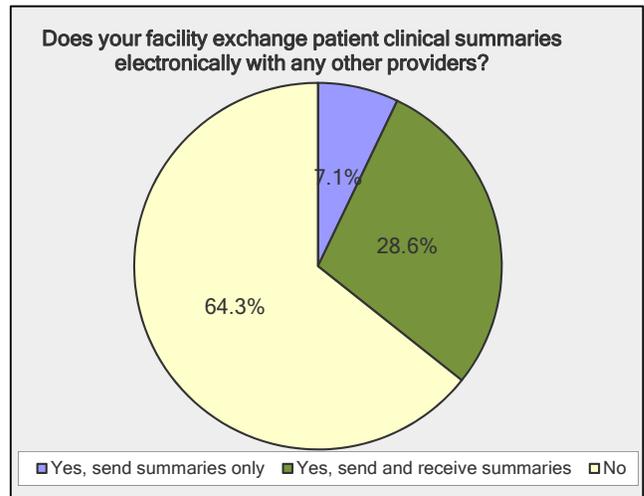


Figure 3-16. Electronic Exchange with Other Providers

**Question 27: What is the name of your facility's current EMR / EHR system?**

Twelve (55 percent) survey participants answered Question 27, four of which chose one of the given options, while the other eight specified an "other" system. The responses of systems used are as follows:

- Two use Alta Point (with one additional considering setting up Alta Point)
- Two use GE Centricity
- Two use Turbo Doc
- One uses eClinicalWorks
- One uses GE Quantitative Sentinel
- One uses Lytec MD
- One uses McKesson PACS / RIS System
- One uses SOAPware

**Question 28: If "No" on 25, are there plans for installing an EMR / EHR system within the next 18 months?**

Question 28 was the last question to gather information on the usage of electronic records systems. This question was for respondents that answered that they do not currently use electronic medical records systems in Question 25. Ten survey participants answered this question, even though only nine answered no to Question 25. Of the 10 respondents, four (40 percent) indicated that they have plans to install an electronic records system in the next 18 months, three (30 percent) answered that they may install electronic records systems, and three responded that they do not have plans to do so. Figure 3-17 illustrates the breakdown of responses to Question 28.

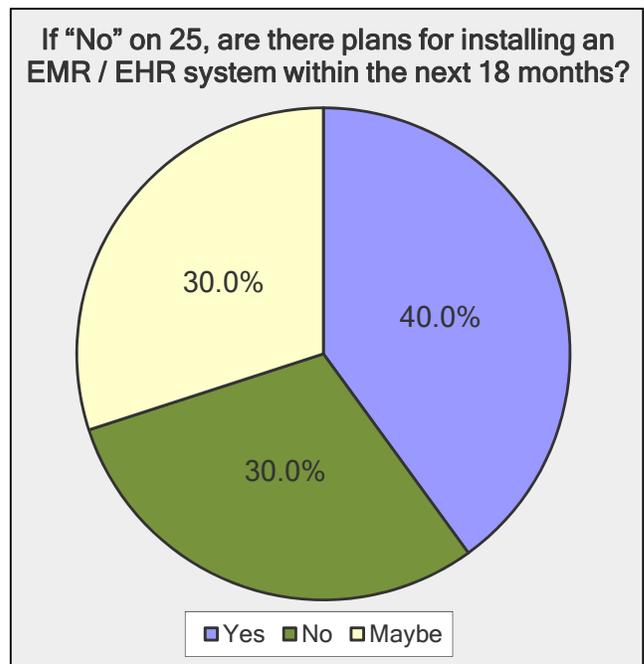


Figure 3-17. Plans to Implement Electronic Records

**Question 29: Please indicate below the current number of staff positions by type of staff. If applicable, please indicate an estimated number of additional staff needed to provide service to meet patient demands.**

Question 29 was an important question to gauge the ability of the various providers to efficiently serve their patients. Twenty-one (95 percent) of the survey participants answered Question 29. The majority of the respondents had a small number of medical professional staff. In terms of full-time staff, 11 respondents (52 percent) only have one doctor at the facility and six (29 percent) respondents have two doctors. One (five percent) facility has four full-time doctors and one facility has six. In terms of medical professionals such as registered nurses, six facilities indicated they have none on-site, eight facilities (38 percent) have one, one facility has two, one facility has three, and one facility has six. This last facility also indicated a total of 23 administrative / support staff.

These numbers indicate that the general responses to the survey were from smaller providers and the larger providers on the island did not return survey results for the study. This impacts the full usability of the data to get a complete overview of the private healthcare system on Guam.

Table 3-5 shows the number of each type of staff that was reported by the individual respondents. The top row indicates the number of staff, while the rows that follow each type of staff indicate the number of respondents that answered with that number.

**Table 3-5. Number of Full-Time Staff**

Staff Type	0	1	2	3-5	6-10	10+
Medical Professionals (MD, DO, DDS, etc.)	–	11	6	1	1	–
Medical Professional (RN, etc.)	6	8	1	1	1	–
Mid-level Providers (Nurse Practitioners, Physician Assistants, etc.)	11	–	2	1	–	–
Medical Support (CNA, MA, LVN, etc.)	3	2	4	4	3	–
Allied Health Professional (RT, Dental Hygienist, Lab Tech, Social Services worker, etc.)	8	2	1	1	–	–
Administrative / Support	1	4	4	6	–	2
Other	7	3	–	–	–	–

In terms of part-time staff, the majority of respondents indicated that they had zero part-time staff for each staff type. These staff may include on-call or fill-in staff during times of vacation or busy periods when additional assistance is needed, or rotating staff that work in between different facilities. For part-time doctor staff, two facilities have one part-time doctor, one facility has two, one facility has three, and one facility has four. For other medical professional staff, including registered

nurses, one facility has one part-time staff, one facility has two, one facility has three, and one facility has eight. Notable among the results was that one facility has 20 part-time medical support staff. The results of responses for part-time staff are shown in Table 3-6. The top row indicates the number of staff, while the rows that follow each type of staff indicate the number of respondents that answered with that number.

**Table 3-6. Number of Part-Time Staff**

Staff Type	0	1	2	3-5	6-10	10+
Medical Professionals (MD, DO, DDS, etc.)	5	2	1	2	–	–
Medical Professional (RN, etc.)	7	1	1	1	1	–
Mid-level Providers (Nurse Practitioners, Physician Assistants, etc.)	7	1	–	–	–	–
Medical Support (CNA, MA, LVN, etc.)	5	1	2	–	–	2
Allied Health Professional (RT, Dental Hygienist, Lab Tech, Social Services worker, etc.)	6	–	1	1	–	–
Administrative / Support	4	4	2	2	–	–
Other	7	1	–	–	–	–

For volunteer staff, only one provider responded that they have any volunteer staff on-board. The respondent indicated that their facility has one “other” category staff that is volunteer. Several of the respondents answered that they have no volunteer staff.

Although a large number of providers indicated that they needed additional staff at their facility during the initial in-person meeting to go over the survey, only three providers responded to Question 29 with a specific number of additional staff they need to meet patient demands. Several of the respondents answered “N/A” in the column for additional staff needed. Two facilities indicated they need one additional doctor, one facility said they need two additional doctors, and one facility responded that they need one additional mid-level provider.

***Question 30: Please describe the type and quantity of major diagnostic / treatment equipment (such as dialysis, x-ray, etc.) of a significant cost (over \$50,000) at your facility.***

The purpose of Question 30 was to get an idea on the types of major medical equipment that are available at the providers on Guam. This question had multiple parts to it to gauge the prevalence of each type of equipment as well as how often they are utilized. The most prevalent piece of equipment identified by respondents was an ultrasound machine, in which six respondents identified that they have one. Five respondents identified they have an X-ray, two reported they have a CT Scanner, one reported they have an MRI machine, and one reported they have a dialysis machine. In addition, in the “other” category, one respondent indicated they have an EKG, one has a Polysomnography machine, and one mentioned having a hyfrecator device. One other respondent reported that they use equipment at Guam Surgicenter. During the site visits to several providers, they also indicated that they utilize equipment at other provider locations for certain medical services or tests.

Some of the providers that answered that they have certain types of equipment also answered the second and third portion of the question, but not all respondents did. The second part of the question was in regard to how many pieces of each type of equipment are at each facility and the third part asked about the utilization rate. Table 3-7 shows the providers that indicated a specific number of equipment at their facility and Table 3-8 shows the utilization rate of those that responded to the question.

**Table 3-7. Number of Equipment at Responding Facilities**

Equipment	Have one	Have two	Have three
CT Scanner	1	–	–
Ultrasound	3	1	1
X-ray	3	1	–
Other: EKG	1	–	–

**Table 3-8. Utilization Rate at Responding Facilities**

Equipment	High	Medium	Low
CT Scanner	–	1	–
Ultrasound	1	3	–
X-ray	–	3	1
Other: EKG	1	–	–

***Question 31: If available, please estimate the average breakdown of the patients that utilized this facility in 2011.***

Question 31 was expected to have a low response rate because many providers mentioned during the initial meeting to review the survey that this was not

information that they have readily available. The question asked information both on the demographic of patients by gender and age groups. As a result, only eight (36 percent) survey participants responded to this question. The results indicated that the majority of patients served by the respondents were female. In response to the portion of the question asking the percentage breakdown by gender, three respondents answered that 46 to 50 percent of their patients are males, one responded that 31 to 35 percent are males, and one answered that 21 to 25 percent of their patients are males. Each of the respondents to Question 31 answered that greater than 46 percent of the patients they see are female, with three of them serving females exclusively.

In terms of age group demographics, none of the respondents reported that they serve patients older than 65 years of age. Although the sample of providers that responded is low, this is disconcerting and indicates a lack of care for the older population on Guam. The largest age demographic of the respondents was for newborns to 12-year olds. One respondent answered that 76 to 80 percent of their patients are between ages newborn to 12, and another answered that 46 to 50 percent of their patients are in this age range. On the other hand, three respondents indicated that none of their patients fall within this age range. For the age group 21 to 64, one respondent answered that 46 to 50 percent of their patients are within this range. The remaining responses were fairly scattered among the age groups. Table 3-9 shows the percentages served by age group, based on individual provider responses.

**Table 3-9. Percentage Served by Age Group**

Age Group	0%	1-5%	11-15%	16-20%	21-25%	26-30%	36-40%	46-50%	76-80%
0-12	3	1	–	–	1	–	–	1	1
13-17	1	1	2	–	2	1	–	–	–
18-20	1	4	–	–	–	–	1	–	–
21-64	3	–	–	2	–	–	–	1	–
65-74	6	–	–	–	–	–	–	–	–
75+	6	–	–	–	–	–	–	–	–

**Question 32: If available, please estimate the percent of patients that came from each Village / location in 2011.**

Question 32 did not receive a high degree of responses due to the nature of the information being asked for. Many providers do not readily track this information, so it was not something they could easily answer. Only four (18 percent) of the survey participants responded to this question. The largest percentages of patients were identified to come from the villages of Dededo, Tamuning, and Yigo. This was expected since these are the most populous villages, and because large proportion the facilities are located within these villages or close to them. Of the respondents, one indicated that 46 to 50 percent of patients are from Dededo, one answered that 46 to 50 percent are from Yigo. In the 36 to 40 percent range, one respondent answered Hagåtña, one responded with Tamuning, and one answered Yigo. In the range of 26 to 30 percent, two responded with Dededo, one responded with Tamuning, and one responded with Yigo. One responded answered Sinajana for the range of 21 to 25 percent. Within the zero to 10 percent ranges, the results were generally distributed among the remaining villages.

**Question 33: How do patients pay for services (excluding co-pays, estimate percentage by type in 2011)?**

Fifteen (68 percent) of the survey participants answered Question 33. The largest type of payments for services was through private insurance. Five (33 percent) of the respondents identified that more than 71 percent of their payments come from private insurance, and only one respondent indicated that zero percent of their payments come from private insurance. This can cause issues for some patients, as one of the biggest setbacks in services that were voiced by providers was problems with insurance companies. It should be noted that two respondents answered that more than 81 percent of their payments are in the form of “other”. Medicare, Medicaid, MIP, Tri-Care, and cash / out of pocket payments were on the lower end of the spectrum, with a majority of these payment types only accounting for less than 11 percent of the payments. The breakdown of respondents’ answers to types of percentage by payment type is shown in Table 3-10.

**Table 3-10. Percentage Payments by Type**

Payment Type	0%	1-10%	11-20%	21-30%	31-40%	41-50%	71-80%	81-90%	91-99%
Private Insurance	1	2	–	3	2	2	2	2	1
Medicare	2	4	1	2	1	1	–	–	–
Medicaid	3	3	3	1	1	–	1	–	–
MIP	2	6	1	1	2	–	–	–	–
Tri-Care / Military Benefit	1	6	2	–	–	1	–	–	–
Cash / Out of Pocket	1	9	–	1	2	1	–	–	–
Other	1	3	–	1	–	–	–	1	1

**Question 34: Approximately what percentage of your patients are active duty military or dependents of active duty military?**

Due to the number of military personnel and their families on Guam, it is also important to get an idea of how private providers are impacted by, or provide services to, military and their dependents. Eighteen (82 percent) of the survey participants answered Question 34. The largest amount of respondents (seven respondents, or 39 percent) indicated that between one and five percent of their patients are active military or their dependents. Of the remaining responses, three (17 percent) reported that zero percent of their patients are military or dependents, three reported that six to ten percent are military or dependents, three reported that 16 to 20 percent are military or dependents, one (six percent) reported that 11 to 15 percent are military or dependents, and one reported that 81 to 85 percent of patients are military or dependents. Figure 3-18 illustrates the breakdown of the number of individual providers that indicated a specific percentage range of patients that are military or their dependents.

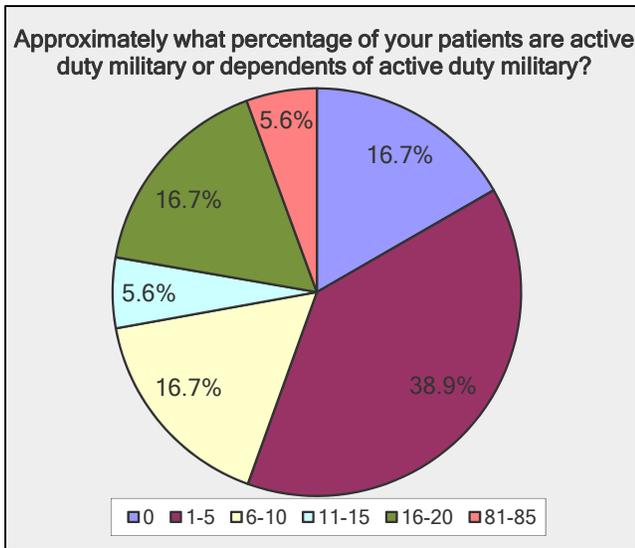


Figure 3-18. Percentage of Patients Who are Active Military or Dependents

**Question 35: Approximately what percentage of your patients are not Guam residents?**

Seventeen (77 percent) of the survey participants answered Question 35. The most common response to this question was that only one to five percent of the patients are not Guam residents. This answer was given by 13 (80 percent) of the respondents. Additionally, one respondent indicated that zero percent of their patients are not Guam residents, one answered that six to ten percent of patients are not Guam residents, one answered that 11 to 15 percent are not Guam residents, and one answered that 16 to 20 percent of patients are not Guam residents. Guam is often referred to as a regional hub for healthcare for nearby islands, but these responses indicate that a low number of off-island residents are seen by private providers. This could mean that the public facilities on-island have a bigger burden of serving the off-island populations that seek treatment or care on Guam. Figure 3-19 illustrates the breakdown of responses of the individual providers in terms of what percentage range of their patients are not Guam residents.

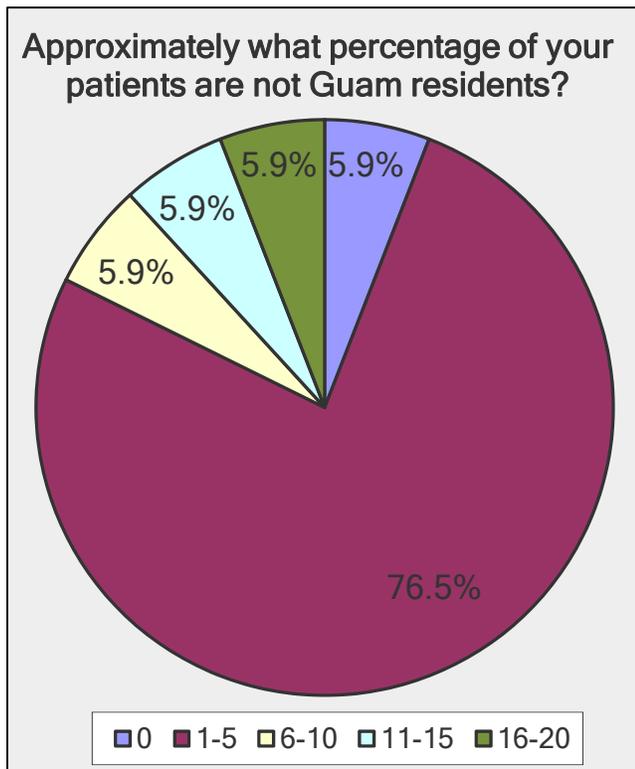


Figure 3-19. Percentage of Patients Who are Not Guam Residents

**Question 36: Please briefly describe common restrictions or constraints on providing services needed by your patients, if any.**

This was the final question of the survey and was meant to prompt discussion of any remaining issues that were not covered by the previous questions. During the individual meetings with the providers when the survey was first discussed and distributed, many of the providers indicated various problems and issues that inhibit their service to patients, yet only 12 (55 percent) of the survey participants responded to this question. One of the responses was that there are no restrictions or constraints, so in actuality, only half of the participants responded with concerns. The most commonly mentioned restrictions were in regards to insurance coverage or a patient’s ability to pay for care and shortages in staff or certain types of specialties. The responses that were provided by respondents are listed as follows:

- Speech barriers.
- Patient non-compliance.
- No insurance coverage for necessary supplies / materials.
- Insurance coverage limitations ("Chronic orthopedic condition", a prejudicial term used by insurance companies to exclude conditions that last 6 months or more).
- Transportation hassles, especially with mass transit system or ambulance.
- Lack of orthopedic doctors on island.
- Non-availability of equipment or supplies, and pharmaceutical companies' refusal to ship to Guam.
- Lack of surgical equipment at GMH.
- Alarming number of patients lacking insurance coverage because of costs, thus canceling their appointments or procedures.
- Insurance coverage: Some patients have no insurance and cannot be seen. We have had problems getting reimbursement for government insurances such as MIP Medicaid and Medicare and needed from time to time to cut back on seeing such patients.

- Insurance coverage: Insurance companies facilitating patients to go to the Philippines for medical care by giving incentives of waiving copays and deductibles all the while being able to claim tax exempt status on Guam for GRT & withholding. Moreover, the health insurance companies send administrative tasks to be done in the Philippines to reduce costs although the law to allow their tax exempt status was meant to create jobs on Guam and circulate the money on Island for the benefit of the Guam local economy.
- Insurance coverage: The restrictions insurance has on Diabetic foot care, and the lack of receiving payments from insurance companies in a timely manner. The lack of receiving payments on time places a hardship on getting much needed medical supplies to treat patients.
- Insurance coverage: Some patients' unavailability of funds to take care of deductibles/co-pays; non-compliance with physicians' orders, lack of certain subspecialties on island to refer patients to. Many patients cannot afford the medicine they are prescribed.
- Services at the birthing center are impacted by the number of obstetricians and midwives available in the community. As OB/GYN providers retire, access to prenatal care becomes a challenge and that will limit the number of patients who are able to deliver at Sagua Managu.
- Staffing and a lack of specialists limits the capacity to provide services.
- Some respondents characterized the healthcare industry as a “hostile business environment” due to problems with the medical professional boards and public agencies.

*Please see the next page.*



## Section 4: Department of Defense Healthcare Facilities

### Inside Section 4 . . .

Guam Naval Hospital .....	4-2
Naval Branch Health Clinics .....	4-4
Veterans Clinic .....	4-5
Andersen Clinic .....	4-5

*The Department of Defense (DoD) operates several healthcare facilities on Guam to support the Armed Forces personnel and retirees stationed and living on the island. These facilities also provide a degree of support to the civilian community if the need arises. Healthcare is currently delivered to the military populations on Guam by the Guam Naval Hospital, and several clinics spread around the island. With the potential relocation of approximately 8,000 Marines and 9,000 dependent family members from Japan to Guam, the DoD healthcare facilities require an overhaul to provide adequate healthcare delivery to the increased population on Guam. This healthcare delivery overhaul involves the complete replacement of the current Guam Naval Hospital, a complete replacement of the Guam Naval Base Clinic, and a new Base Health Clinic Finegayan.*

*Since the Medical Delivery Plan focuses on the civilian healthcare network on Guam, DoD facilities were not asked to complete the provider surveys that were distributed to the public and private healthcare providers on Guam. Instead, the information used to discuss the DoD facilities was from DoD operated websites and other published information sources obtained during the development of this document. This section is meant to provide an overview of the DoD presence in the healthcare system on Guam, and not an analysis of its shortfalls and hindrances to service.*

## Guam Naval Hospital

### *Existing Hospital*



*The existing Guam Naval Hospital*

Guam Naval Hospital in Agana Heights is the primary medical facility for military personnel, retirees, and their dependents on Guam. Normal hours of operation for the hospital are from 8:00 am to 4:00 pm, Monday through Friday, while the pharmacy operates from 8:00 am to 5:00 pm Monday through Friday. The Naval Hospital also serves as a redundant resource for providing first responder care for Guam civilians and visitors in emergencies. In the case of a life-threatening injury and considering the proximity of other available treatment facilities, civilians may be treated at the Naval Hospital instead of Guam Memorial Hospital (GMH).

Services that are offered at Guam Naval Hospital include:

- allergy,
- behavioral health,
- case management,
- clinical psychology,
- CT scanner,
- dermatology,
- developmental disabilities,
- dietetics,
- Ear / Nose / Throat surgery,
- emergency services,
- family health and medicine,
- internal medicine,
- labor and delivery,
- mental health,

- normal newborn nursery,
- nuclear medicine,
- OB / GYN,
- occupational therapy,
- ophthalmology,
- optometry,
- orthopedic surgery,
- pediatrics,
- physical medicine,
- physical therapy,
- population health (wellness),
- post anesthesia care unit,
- psychiatry,
- psychology,
- pulmonology,
- social work,
- substance abuse,
- surgery,
- ultrasound,
- urology,

The Naval Hospital also operates a branch medical clinic and a branch dental clinic at Naval Base Guam for military personnel. Each of these clinics provides outpatients services and perform invasive procedures. The Medical Clinic is open from 7:30 am to 4:30 pm Monday through Friday, while the Dental Clinic is open from 7:30 am to 3:30 pm Monday through Friday

## New Hospital



*Planned Design for the new Guam Naval Hospital*

The Guam Naval Hospital is undergoing a complete facility replacement scheduled to open in 2014. The new 282,000-square foot replacement facility will provide a modern replacement facility to address the projected future needs of Guam's military population and their dependents. The new hospital will be patient-centric and allow more flexibility in space utilization such as more room for accompanying guests or family members of patients or the ability to convert doctor offices into examination / treatment rooms in the cases of surges. These evidenced-based design measures are some of the enhancements that will modernize a nearly 60 year-old infrastructure system to enable more efficient health care delivery. As part of this increase in efficiency, the replacement facility is planned for a reduced footprint from its current size of 306,000 square feet; this will improve proximity between staff and patients reducing travel distances for patients and will also move less-demanding clinics and services to upper floors to allow for heavier-traffic departments and services to be located near entrances and exits.

Among the other upgraded amenities, the new hospital will include 42 inpatient beds, an intensive care unit with six beds, four modern operating rooms, and two C-section rooms.

This infrastructure modernization and the upgraded space requirements and equipment planned for the facility will improve the quality of care for patients by enhancing current services and capabilities. Services include general, family, and internal medicine, mental health, specialty, and wellness and prevention programs.

These capabilities are:

- general / family and internal medicine,
- family practice,
- internal medicine,
- OB / GYN, and
- pediatrics,

### Specialties

- anesthesia,
- dental surgery,
- emergency medicine,
- general surgery,
- ophthalmology,
- optometry,
- otolaryngology,
- physical therapy, and
- urology.

### Mental Health Capabilities

- psychiatry,
- psychology, and
- social work services.

### Wellness and Prevention Programs

- health promotions,
- nutrition, and
- occupational health and preventive medicine.

In addition to the spacing utilization and program / departmental enhancements, the Naval Hospital will also add a Magnetic Resonance Imaging (MRI) Unit to enable the hospital to perform MRIs for patients in need of such service.

These capabilities will be enhanced in the new facility partially due to the room / office space that will be allocated to these departments and services. As identified in Table 4-1, some departments have realized a reduction in space increase efficiency and workflow. Table 4-1 compares the current spacing of departments with the replacement facility.

Table 4-1. Space Change Between the Current Naval Hospital and the New Naval Hospital

Department Name	Current Space (square feet)	Replacement Facility (square feet)	Percentage Change in Department Space
Dental / Oral Surgery	2,115	3,255	54%
Dermatology Clinic	946	1,904	101%
Ear, Nose, and Throat / Audiology	1,662	3,983	140%
Internal Medicine / Cardiology / Respiratory Therapy	2,519	6,321	151%
Laboratory	6,345	9,575	51%
Mental Health	2,313	4,116	78%
Ophthalmology / Optometry	8,023	5,222	-35%
Obstetrics and Gynecology	7,570	8,042	6%
Orthopedics / Podiatry / Chiropractic / Sports Medicine	3,926	5,152	31%
Pediatrics	6,383	5,762	-10%
Pharmacy	3,815	4,638	22%
Physical Therapy	5,017	3,138	-37%
Preventive Medicine	2,572	2,400	-7%
Primary Care / Family Practice	12,170	1,679	-86%
Radiology	5,562	15,280	175%
Urology	1,140	4,256	273%

Source: US Governmental Accountability Office, "Defense Infrastructure – The Navy Needs Better Documentation to Support Its Proposed Military Treatment Facilities on Guam", April 2011.

## Naval Branch Health Clinics

Two new clinics will be built on Guam in conjunction with the construction of the new Naval Hospital. These clinics will provide services, including:

- primary care,
- dental care,
- limited urgent and extended hours care,
- mental health,
- ancillary services,
- preventive medicine, and
- support services.

### Apra Harbor Clinic

Naval Base Guam currently operates a healthcare clinic primarily providing outpatient and dental services to eligible military personnel and beneficiaries. This branch clinic is located on the naval base and is currently undergoing a complete replacement to upgrade equipment and infrastructure. This complete facility upgrade combined will help to support the majority of the primary care services for Guam’s Navy and their dependents.

Upon completion which is scheduled for mid-year 2013, the 48,599 square foot clinic will enable military personnel and dependents access to outpatient services such as primary care and family practice, pharmacy services, dental clinic, mental health services, physical therapy clinic, and preventive medicine and acute care services.

### North Finegayan Clinic

The future Naval Branch Clinic (NBC) North Finegayan is planned for the northern portion of the Island near Andersen AFB. Construction on the NBC North Finegayan will begin upon completion of the NBC Apra Harbor. The NBC North Finegayan is expected to open and provide services to eligible beneficiaries by late 2015.

The slightly larger, 64,078 square feet, NBC North Finegayan will offer similar services to that of NBC Apra Harbor to eligible personnel and dependents. NBC North Finegayan will support outpatient services such as primary care and family practice, pharmacy services, dental clinic, mental health services, physical therapy clinic, and preventive medicine.

## Veterans Clinic

A new 6,000 square foot community-based Veterans Affairs (VA) clinic was officially opened in May 2011 adjacent to the Naval Hospital. The facility cost \$5.4 million and provides twice the space as the previous clinic. The clinic offers improved access for patients and enhanced technology and treatment capabilities such as the use of telemedicine functions to provide enhanced specialty care through connections with other VA facilities.

The capabilities of the Andersen Clinic are adequately provided by professional staffing composed of an optometrist, a women's health nurse practitioner, a psychologist, social workers, and five primary care managers.

## Andersen Clinic



*Andersen AFB Clinic*

The health clinic at Anderson Air Force Base (AFB) primarily serves the military population and their dependents stationed at this installation. The clinic is open Monday through Friday from 8:00 am to 5:00 pm. The Andersen Clinic supports approximately 90% of its eligible population; while more severe cases are referred to the Guam Naval Base Hospital. Primarily an outpatient facility and relatively small in size (it is not a hospital), Andersen Clinic supports medical services such as pediatric and adolescent care, prenatal / obstetric care, adult and geriatric medicine, OB / GYN services, family medicine, optometry, and a pharmacy. Additional outpatient services typically include preventive and wellness services and programs, immunizations, dental, occupational medicine, mental health services, social work, and family advocacy services, as well as capabilities to perform minor surgical procedures.

*Please see the next page.*

# APPENDICES



*Page intentionally left blank.*



*Office of the Governor of Guam*

February 2, 2012

Hafa Adai,

On behalf of the Office of the Governor, it is my pleasure to introduce you to Matrix Design Group, Inc. (Matrix). Matrix has been retained by the Government of Guam (GovGuam) to develop a Medical Services Delivery Plan, which will provide important health care information to the people of Guam and will help to preserve a healthy island for future generations.

The first phase of the Medical Services Delivery Plan includes a Medical Services Providers Assessment component, to understand the existing strengths and shortfalls in Guam's current medical delivery system. The assessment will document the existing conditions of the medical services delivery system and an understanding of the capacity and capability of the current system to provide adequate health care to Guam's residents. This information will be used to identify areas of care that have a surplus or deficiency relative to staffing, equipment or facilities and which impairs or impacts the quality of care available on Guam.

You are receiving this letter because your agency or private company has been identified as a stakeholder involved with health care services whose assistance is needed in the development of Medical Services Delivery Plan. Your assistance is greatly needed in this effort.

Your participation through completion of the attached questionnaire will help to develop a better picture and understanding of the medical services delivery system on Guam. The purpose of this questionnaire is NOT to assess the capacity of individual providers, but to develop a database of information from as many providers as possible to enable a comprehensive assessment of Guam's overall medical services delivery system.

**THANK YOU** for your participating in this very important effort to better understand Guam's medical services delivery system!

If you have any questions or comments, please do not hesitate to contact Carol Perez in the Office of the Governor at (671) 475-3221.

A handwritten signature in black ink that reads "Mark S. Calvo".

Mark Calvo  
Special Assistant to the Governor  
Office of the Governor

# GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE

## GENERAL PROVIDER INFORMATION

1. **Name of Organization:**

**Survey Completed by:**  **Date:**

If organization has more than one facility, please fill out a survey for each facility.

2. **Name of Facility:**

Facility Address:

Primary Contact Person:

Phone Number:

e-mail:

3. **Hours of Operation (enter in military time 0800 – 1600 would equal 8 am to 4 pm). If open 24 hours a day, just enter “ALL”.**

Mon	Tues	Wed	Thurs	Fri	Sat	Sun

4. **What is the average number of patients you see per day?**

5. **Please check all of the following services that you offer, and the estimated average daily number of patients for each service in 2011. Note: a single patient may have more than one service per visit. Please mark all that apply.**

Type of Service Offered	Offered (Y / N)	Estimated Number of Daily Patients	Percent of Patients		
			Out-Patient	In-Patient	Home Visit
Diagnostic / Screening (Primary Care)					
Emergency					
Laboratory					
Procedures / Treatment					
Pediatrics					
Mental Health					

**Specialty Services (i.e., cancer, dialysis, etc., please list below):**


# GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE

## GENERAL FACILITY INFORMATION

6. What is the overall square footage of this facility?

7. Summary of key work / patient areas:

Type of Room	Number	Adequate for Current Patients (Y/N)
Exam / Treatment Rooms		
Physician Offices		
Patient Waiting Area (Number of Seats)		
Recovery / In-Patient Beds		
X-ray		
Medical Supply Storage		
Pharmacy		

**Other key areas (please list below):**


8. Please briefly describe any issues / impediments to providing medical services at your facility (i.e., size, location), as well as any opportunities to expand and / or enhance services.

## GENERAL EQUIPMENT INFORMATION

9. Please describe the type and quantity of major diagnostic / treatment equipment of a significant cost (over \$50,000) at your facility.

Type of Equipment	Do you have this at your facility? (Y/N)	How Many?	Utilization rate (High, Medium, Low)?	Does the equipment meet current patient demand?
MRI				
CT Scanner				
Ultrasound				
X-ray				

**Other key equipment (please list below):**


# GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE

## GENERAL STAFFING INFORMATION

10. Please indicate below the current number of staff positions and indicate if it is an adequate or inadequate staffing level. If applicable, please indicate an estimated number of additional staff needed to provide adequate service.

Staff Type	Full-Time (Number)	Part-Time (Number)	Volunteer (Number)	Meets Patient Demand? (Y/N)	Additional Staff Needed? (Number)
Medical Professional (MD, DO, DDS, etc.)					
Medical Professional (RN, etc.)					
Medical Support (CNA, MA, LVN)					
Allied Health Professional (RT, Dental Hygienist, Lab Technician, Social Services)					
Administrative / Support					
Other					

## GENERAL PATIENT INFORMATION

11. If available, please estimate the average breakdown of the patients that utilized this facility in 2011.

Gender	Percent by Patient's Sex	Percent by Age Group					
		Percent Age 0-12	Age 13-17	Age 18-20	Age 21-64	Age 65-74	Age 75+
Male							
Female							

12. Estimate percent of patients that came from the following Villages / locations in 2011:

Location	%	Location	%	Location	%
Agana Heights		Inarajan		Talofofo	
Agat		Mangilao		Tamuning	
Asan-Maina		Merizo		Umatac	
Barrigada		Mongmong-Toto-Maite		Yigo	
Chalan Pago-Ordot		Piti		Yona	
Dededo		Santa Rita		Off-Island	
Hagåtña		Sinajana		Other	

## GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE

**13. How do patients pay for services (excluding co-pays, provide percentage by type) (in 2011)?**

Type of Payment	Percent
Private Insurance	
Medicare	
Medicaid	
MIP	
Tri-care / military benefit	
Cash / Out of Pocket	
Unable to pay	
Other	

**14. What percentage of your patients are active duty military or their dependents?**

**15. What percentage of your patients are not Guam residents?**

**16. Please briefly describe common restrictions or constraints on providing services needed by your patients, if any.**

Thank you for your participation!

Please return completed survey to [medical@oneguam.com](mailto:medical@oneguam.com) by February 10, 2012.

*Page intentionally left blank.*



*Office of the Governor of Guam*

July 16, 2012

Hafa Adai,

On behalf of the Office of the Governor, it is my pleasure to introduce you to Matrix Design Group, Inc. (Matrix). Matrix has been retained by the Government of Guam (GovGuam) to develop a Medical Services Delivery Plan, which will provide important health care information to the people of Guam and will help to preserve a healthy island for future generations.

The first phase of the Medical Services Delivery Plan includes a Medical Services Providers Assessment component, to understand the existing strengths and shortfalls in Guam's current medical delivery system. The assessment will document the existing conditions of the medical services delivery system and an understanding of the capacity and capability of the current system to provide adequate health care to Guam's residents. This information will be used to identify areas of care that have a surplus or deficiency relative to staffing, equipment or facilities and which impairs or impacts the quality of care available on Guam.

You are receiving this letter because your agency or private company has been identified as a stakeholder involved with health care services whose assistance is needed in the development of Medical Services Delivery Plan. Your assistance is greatly needed in this effort.

Your participation through completion of the attached questionnaire will help to develop a better picture and understanding of the medical services delivery system on Guam. The purpose of this questionnaire is NOT to assess the capacity of individual providers, but to develop a database of information from as many providers as possible to enable a comprehensive assessment of Guam's overall medical services delivery system.

**THANK YOU** for your participating in this very important effort to better understand Guam's medical services delivery system!

If you have any questions or comments, please do not hesitate to contact Carol Perez in the Office of the Governor at (671) 475-3221.

Mark Calvo  
Special Assistant to the Governor  
Office of the Governor

## ***GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE***

---

We understand that some of the answers or information you provide may be proprietary in nature. Your information will only be used to create an aggregate compilation of the number and types of services available and patients served for Guam as a whole. As such, data from respondents will not be discussed on an individual basis in the report.

This survey **does not** request any information that could be used to identify an individual patient or can be used to identify an individual patient, and therefore, does not violate patient confidentiality.

Please complete as much of this survey as you can. Participation by the broad range of providers on Guam is needed to develop a complete picture of services available and areas where deficiencies exist.

### ***HOW TO RETURN THE SURVEY***

---

There are four different ways you can return the survey. Pick the one that is easiest for you.

1. Complete the survey online by going to the following website:  
[http://www.surveymonkey.com/s/Guam\\_Medical](http://www.surveymonkey.com/s/Guam_Medical)
2. Complete the Acrobat form electronically. If you received the survey via e-mail, just type in or click on the answer you want. On the last page, just click submit to send in your answers.
3. Complete the Acrobat form electronically. When done, save the file to your computer and then e-mail the file to [medical@oneguam.com](mailto:medical@oneguam.com)
4. Print and fill out the form. We will visit your office during the week of July 22<sup>nd</sup> and will collect the survey or provide you with a postage paid envelope.

If you have any questions, send an e-mail to [medical@oneguam.com](mailto:medical@oneguam.com)

Please respond by July 31, 2012.



## GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE

**9. Who owns the practice (check one type)?**

- |  |  |
|--|--|
| <input type="radio"/> Physician or physician group               | <input type="radio"/> HMO                              |
| <input type="radio"/> Community Health Center                    | <input type="radio"/> Medical / academic health center |
| <input type="radio"/> Hospital                                   | <input type="radio"/> Other health care corporation    |
| <input type="radio"/> Federal entity                             |  |
| <input type="radio"/> Other – specify type (not person's name) → |  |

**10. Looking at the list below, choose ALL of the setting types that describe this facility.**

- |  |   |
|--|---|
| <input type="checkbox"/> Private solo or group practice  | <input type="checkbox"/> Hospital emergency department                                  |
| <input type="checkbox"/> Freestanding clinic / surgicenter (not part of a hospital outpatient department)                                    | <input type="checkbox"/> Hospital outpatient department                                 |
| <input type="checkbox"/> Community Health Center (e.g., Federally Qualified Health Center, federally funded clinics or 'look alike' clinics) | <input type="checkbox"/> Ambulatory surgicenter   |
| <input type="checkbox"/> Mental health center  | <input type="checkbox"/> Institutional setting (school infirmary, nursing home, prison) |
| <input type="checkbox"/> Non-federal Government clinic (e.g., state, county, city, maternal and child health, etc.)                          | <input type="checkbox"/> Industrial outpatient facility                                 |
| <input type="checkbox"/> Family planning clinic (including Planned Parenthood)   | <input type="checkbox"/> Federal Government operated clinic (e.g., VA, military, etc.)  |
| <input type="checkbox"/> Health maintenance organization or other prepaid practice   | <input type="checkbox"/> Laser vision surgery   |
| <input type="checkbox"/> Faculty Practice Plan   |   |

**11. Roughly, what percent of your daily visits are same day appointments?** %

**12. Does your practice set time aside for same-day appointments?**  Yes  No

**13. On average, about how long does it take to get an appointment for a routine medical exam?**

- 1-2 days
- Within 1 week
- 1-2 weeks
- 3-4 weeks
- 1-2 months
- More than 2 months
- Do not provide routine medical exams

**14. Do practitioners from this facility directly provide any in-home care services?**  Yes  No

**15. Do practitioners from this facility perform any internet / e-mail consults?**  Yes  No

**GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE**

**16. Does this facility have the ability to perform any of the following on site (check all that apply)?**

<input type="checkbox"/> EKG / ECG	<input type="checkbox"/> Lab testing
<input type="checkbox"/> Spirometry	<input type="checkbox"/> Ultrasound
<input type="checkbox"/> X-Ray	

**17-18. Please check all of the following services that you offer, and the estimated number of patients for each service in the week prior to the date of this survey. Note: a single patient may have more than one service per visit. Please mark all that apply.**

Type of Service Offered	17. Offered (Yes / No)	18. Estimated Number Patients Last Week
Diagnostic / Screening (Primary Care)		
Surgical Specialty Services		
Medical Specialty Services		
Emergency		
Laboratory		
Procedures / Treatment		
Pediatrics		
Mental Health		

**Specialty Services (i.e., chemotherapy, dialysis, etc., please list below):**


**GENERAL FACILITY INFORMATION**

**19. What is the overall square footage of this facility?** square feet

**20. Is there room to expand at your location?**  Yes  No

**GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE**

**21-22. Summary of key work / patient areas:**

Type of Room	21. Number	22. Adequate for Current Patients (Y/N)
Exam / Treatment Rooms		
Physician Offices		
Patient Waiting Areas (Number of Seats)		
Recovery / In-Patient Beds		
X-ray Rooms		
Medical Supply Storage		
Pharmacy		

**Other key areas (please list below):**


**23. Please briefly describe any issues / impediments to providing medical services at your facility (i.e., size, location), as well as any opportunities to expand and / or enhance services.**

**ELECTRONIC RECORDS**

**24. Does your facility submit any claims electronically?**

- Yes       No

**25. Does your practice use an electronic medical record (EMR) or electronic health record (EHR) system? Do not include billing record systems.**

- Yes, all electronic  
 Yes, part paper and part electronic  
 No (skip to #28)

**26. Does your facility exchange patient clinical summaries electronically with any other providers?**

- Yes, send summaries only  
 Yes, receive summaries only  
 Yes, send and receive summaries  
 No

**GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE**

27. What is the name of your facility's current EMR / EHR system?

- |   |  |                                       |
|---|--|---------------------------------------|
| <input type="radio"/> Allscripts        | <input type="radio"/> eMDs             | <input type="radio"/> NextGen         |
| <input type="radio"/> Cerner            | <input type="radio"/> GE Centricity    | <input type="radio"/> Sage            |
| <input type="radio"/> CHARTCARE         | <input type="radio"/> Greenway Medical | <input type="radio"/> SOAPware        |
| <input type="radio"/> eClinicalWorks    | <input type="radio"/> MED 3000         | <input type="radio"/> Practice Fusion |
| <input type="radio"/> Epic              |  |                                       |
| <input type="radio"/> Other – specify → |  |                                       |

28. If “No” on 25, are there plans for installing an EMR / EHR system within the next 18 months?

- Yes    No    Maybe

**GENERAL STAFFING INFORMATION**

29. Please indicate below the current number of staff positions by type of staff. If applicable, please indicate an estimated number of additional staff needed to provide service to meet patient demands.

Staff Type	Full-Time (Number)	Part-Time (Number)	Volunteer (Number)	Additional Staff Needed? (Number)
Medical Professionals (MD, DO, DDS, etc.)				
Medical Professionals (RN, etc.)				
Mid-level providers (nurse practitioners, physician assistants, etc.)				
Medical Support (CNA, MA, LVN, etc.)				
Allied Health Professional (RT, Dental Hygienist, Lab Technician, Social Services worker, etc.)				
Administrative / Support				
Other				

**GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE**

**GENERAL EQUIPMENT INFORMATION**

30. Please describe the type and quantity of major diagnostic / treatment equipment (such as dialysis, x-ray, etc.) of a significant cost (over \$50,000) at your facility.

Type of Equipment	Do you have this at your facility? (Yes / No)	How Many?	Utilization rate (High, Medium, Low)?

**GENERAL PATIENT DEMOGRAPHICS**

31. If available, please estimate the average breakdown of the patients that utilized this facility in 2011.

Gender	Percent	Percent by Age Group					
		Age 0-12	Age 13-17	Age 18-20	Age 21-64	Age 65-74	Age 75+
Male	%	%	%	%	%	%	%
Female	%	%	%	%	%	%	%

32. Estimate the percent of patients that came from each Village / location in 2011.

Location	%	Location	%	Location	%
Agana Heights	%	Inarajan	%	Talofofo	%
Agat	%	Mangilao	%	Tamuning	%
Asan-Maina	%	Merizo	%	Umatac	%
Barrigada	%	Mongmong-Toto-Maite	%	Yigo	%
Chalan Pago-Ordot	%	Piti	%	Yona	%
Dededo	%	Santa Rita	%	Off-Island	%
Hagåtña	%	Sinajana	%	Other	%

**GUAM MEDICAL SERVICE DELIVERY PLAN QUESTIONNAIRE**

**33. How do patients pay for services (excluding co-pays, estimate percentage by type in 2011)?**

Type of Payment	Percent
Private Insurance	%
Medicare	%
Medicaid	%
MIP	%
Tri-care / military benefit	%
Cash / Out of Pocket	%
Other	%

**34. Approximately what percentage of your patients are active duty military or dependents of active duty military?**

**35. Approximately what percentage of your patients are not permanent Guam residents?**

**ADDITIONAL INFORMATION**

**36. Please briefly describe common restrictions or constraints on providing services needed by your patients, if any.**

Thank you for your participation!  
Please return completed survey to [medical@oneguam.com](mailto:medical@oneguam.com)

**SUBMIT**

*Page intentionally left blank.*

*Page intentionally left blank.*

