

Guam Medical Service Delivery Plan 2022 Update

MEDICAL PROVIDERS
BASELINE ASSESSMENT

DRAFT FINAL | APRIL 2022





Guam Medical Service Delivery Plan 2022 Update



Prepared for:

UFISINAN I MAGA'HÅGA

OFFICE OF THE GOVERNOR

Ricardo J. Bordallo Complex

513 West Marine Corps Drive

Hagatna, Guam 96910

Prepared by:



Matrix Design Group, Inc.

2020 N Central Avenue, Suite 1140

Phoenix, AZ 85004

Draft Final

April 2022

This document was prepared for the Government of Guam under contract with the Office of the Governor of Guam and with financial support from the Department of Defense Office of Local Defense Community Cooperation (OLDCC). The content reflects the views of Government of Guam and does not necessarily reflect the views of OLDCC.

This page intentionally left blank.

1. Project Overview

Table of Contents

Table of Contents	1
1. Introduction	3
1.1. What is the Medical Services Delivery Plan	3
1.2. Methodology	3
2. Background	5
2.1. Demographics	5
2.2. COVID-19	5
2.2.1. Global Impact of COVID-19	5
2.2.2. COVID-19 Impact On Guam	5
2.3. Emerging Trends	9
2.3.1. In Guam	9
2.3.2. Globally	10
2.4. Survey and Data Acquisition Methodology	11
3. Public Providers	12
3.1. Guam Memorial Hospital Authority (GMHA)	13
3.1.1. Staff	14
3.1.2. Hospital Units and Services	15
3.1.3. Patient Trends	16
3.1.4. Financial Highlights	17
3.1.5. COVID-19	22
3.1.6. Hospital Accreditation	26
3.1.7. Staff	27
3.1.8. Planned Improvements and Updates	28
3.1.9. Facility Conditions	32
3.1.10. Issues and Challenges	37
3.1.11. Outlook	43
4. Private Providers	46
4.1. Facility Changes Since 2012	47
5. Survey Results	49
5.1. Key Findings	80
6. Department of Defense Health Care Facilities	81
6.1. Guam Naval Hospital	81

6.2.	Naval Branch Health Clinics	82
6.2.1.	Apra Harbor Clinic	82
6.2.2.	North Finegayan Clinic	83
6.3.	Veterans Clinic	83
6.4.	Andersen Clinic	83
7.	Appendix.....	84
7.1.	Letter from the Governor	84
7.2.	Electronic Survey	85
7.3.	Interactive GIS Database Instructions	86

1. Introduction

1.1. What is the Medical Services Delivery Plan

The Guam Medical Services Delivery Plan (Delivery Plan) is a part of the Office of the Governor's initiative to improve the health care system in Guam for current residents and future generations. This update builds upon the previous Guam Medical Services Delivery Plan conducted in 2012, which was developed from the Five-Year Health and Social Services Strategic Plan completed in 2009.

This plan is broken into five major sections:

- Section 1: Plan overview with methodology and key findings
- Section 2: Background information on Guam's current health care trends and health care trends globally
- Section 3: Details about public providers and their current operating conditions
- Section 4: Details about private providers and their responses to the provider survey
- Section 5: A brief overview of Department of Defense facilities

An appendix is also provided with supporting documents, the GIS map of medical provider locations, and additional materials. The GIS map compiles an interactive map to showcase the locations of known medical providers, outpatient care centers, dental practices, ancillary service providers, and medical good retailers, as well as health system administration and financing offices on the island.

This update articulates the change in medical services, emerging needs in the medical field, COVID-19 impact, availability of medical services in Guam, and details about current public and private providers in Guam. By gathering and comparing this information, this assessment is meant to comprehensively document trends, improvements, and problem areas related to medical access on island.

1.2. Methodology

The methodology used to conduct this update is as follows:

- Local medical experts and reliable sources of research were identified, along with industry leaders in medical development. The Matrix team collected and examined their publications, key focuses, and most recent reports. Some of the key sources include: Guam Recovery Research Project by University of Guam, Journal of Public Health Management and Practice: US-Affiliated Pacific Islands Response to COVID-19, DPHSS After Action Report on COVID-19, Pacific Health Officers Association, Guam Institute for Health Metrics and Evaluation, Guam WHO reports 2018-2022, WHO global trends, and others.
- Guam's pandemic response to COVID-19 was analyzed through the DPHSS After Action report, data from the guamrecovery.com website, Governor's memos, and peer-reviewed reports from medical leaders at the Pacific Island Health Officer's Association. This information was condensed into a simplified timeline of the initial pandemic response in Guam. Vaccination distribution was not analyzed beyond the initial arrival and distribution of vaccines in early 2021.

- Our team analyzed broad surface level COVID-19 impacts from trends noted in private providers' self-reports, Guam-based news articles, and internal medical publications from local providers or industry leaders.
- A list of existing Guam Medical Providers was obtained from the original 2012 survey list and updated with new provider listings.
- The 2012 Private Medical Provider's survey was reviewed and redesigned with expanded questions to allow more detailed and useful insights. The original 58-question survey was lengthened to a 104-question survey. Survey information was collected, analyzed, and compared to the 2012 data, then summarized in section 4.
- Matrix Design Group has maintained key relationships with points of contact at public providers. Our team reached out to them to conduct an interview update to the details they provided in the 2012 report and reviewed the update for accuracy and data gaps.

2. Background

2.1. Demographics

Guam's population has remained mostly steady over the past ten years, showing only a slight decline. In 2010 the total population of Guam and neighboring islands was 159,358. In the most recent 2020 census, there was a population decrease of 3.5%, leaving Guam with a total population of 153,839.

2.2. COVID-19

The Coronavirus pandemic arrived in Guam with the first confirmed case of COVID-19 on March 15th, 2020. Over the next several months, the Government of Guam adapted several procedures to deal with the pandemic, including the design of Pandemic Conditions of Readiness (PCOR) delegations to identify enforcement of pandemic restriction, quarantine measures, and vaccination campaigns.

2.2.1. Global Impact of COVID-19

COVID-19's impact will be studied for years to come. However, a few preliminary trends have been observed regarding the immediate impact on the medical industry.

Vendor of choice relationships – Tight supply lines meant that many medical providers needed to scramble for pandemic-related supplies and found it essential to have backup vendors and a transparent vendor of choice.

Remote work and flexible systems becoming the norms – COVID-19 indicates the need for flexible work and technology infrastructure that enables workers to access information and systems anywhere.

A new emphasis on mental health care - Increased isolation and limited social interaction may have contributed to increased addiction habits, domestic violence, and mental health care needs throughout the pandemic.

2.2.2. COVID-19 Impact On Guam

(Continued on next page)

Guam COVID-19 Timeline

<p>MARCH 2020</p> <ul style="list-style-type: none"> Guam Memorial Hospital restricts its emergency department to staff and patients only. Medical Advisory Group formed to develop the four-level Pandemic Conditions of Readiness (PCOR) guidelines 	
<p>MAR 15, 2020: First confirmed case of COVID-19 on island</p>	<p>APRIL 2020</p> <ul style="list-style-type: none"> Isolation facilities established at hotels DOD builds two COVID-19 field hospitals on military property in Dededo and Agana Heights. Healthcare systems experience overflow of cases and lack of PPE 300% increase in rapid response calls and a corresponding increase in the number of deaths
<p>MAY 2020</p> <ul style="list-style-type: none"> Quarantine implemented for incoming island visitors DPHSS expands testing efforts to focus on those with a lack of access to health care Focus on dense residential areas (apartment complexes and senior care facilities) 	<p>APR 30, 2020: Governor signed Executive Order 2020-11: Pandemic Condition of Readiness (PCOR) recovery plan</p>
<p>MAY 10, 2020: Transition to PCOR 2 (moderate restrictions)</p>	<p>JUNE 2020</p> <ul style="list-style-type: none"> 280 total cases on Guam, 5 deaths Rise in military COVID-19 cases DPHSS works with the military for contact tracing and identifying quarantine spaces in local hotels.
<p>JULY 2020</p> <ul style="list-style-type: none"> DPHSS increases enforcement of sanitation and safety certification for businesses Six businesses were closed for failing to have a business pandemic plan and upholding social distancing requirements 	
<p>JUL 20, 2020: Transition to PCOR 3 (minimum restrictions)</p>	<p>AUGUST 2020</p> <ul style="list-style-type: none"> Surge in positive COVID-19 test results Lack of storage capacity for testing causes DPHSS to switch from mass testing to targeted testing Testing targets high-risk groups and quarantined individuals
<p>SEPTEMBER 2020</p> <ul style="list-style-type: none"> 2,617 total cases on Guam, 49 deaths DPHSS issues a suspension of construction projects to prevent spread 	<p>AUG 14, 2020: Transition to PCOR 1 (maximum restrictions)</p> <p>AUG 20, 2020: PCOR 1 escalated to shut down of all businesses</p>
<p>OCTOBER 2020</p> <ul style="list-style-type: none"> 4,628 cases on Guam, 79 deaths DPHSS issues Covid-19 requirements for places of worship 	
<p>NOVEMBER 2020</p> <ul style="list-style-type: none"> 6,959 cases on Guam, 113 deaths Mass testing resumes DPHSS issues protocols for medical provider's response to patients who test positive 	
<p>DECEMBER 2020</p> <ul style="list-style-type: none"> Guam receives 5,850 doses of Pfizer and 1,300 doses of Moderna vaccine 1,394 doses administered 7,317 cases on Guam, 121 deaths 	
<p>JANUARY 2021</p> <ul style="list-style-type: none"> Guam launches vaccinateguam.gov Pop-up vaccination clinics begin distributing vaccines throughout the community DPHSS issues guidance for schools and businesses on reopening processes 	<p>DEC 15, 2020: Guam receives first shipment of vaccines</p> <p>DEC 29, 2020: Governor signs executive order 2020-46 to extend the state of emergency in Guam</p>
<p>FEBRUARY 2021</p> <ul style="list-style-type: none"> Vaccine clinics open as vaccines become available Drive-through clinics and vaccinations for the homebound begin <p>JAN 4, 2021: Second dose administration becomes available</p> <p>JAN 8, 2021: Moderna vaccinations begin</p> <p>JAN 18, 2021: Transition to PCOR2 (moderate restrictions)</p>	<p>FEB 21, 2021: Transition to PCOR3 – 50% capacity</p>

Government Coordination

When COVID-19 hit Guam, a massive, coordinated response among departments and agencies occurred. DPHSS coordinated ongoing public responses. The Governor of Guam issued an executive order to establish a state of emergency. A medical advisory group was created, and Pandemic Conditions of Readiness (PCOR) were established to monitor necessary public health mandates. The advisory group worked with the governor to assess the risk factors facing Guam using a COVID Area Risk (CAR) Score, which the group used to issue a PCOR level dictating public health mandates and essential services operations.

An interdepartmental review process pooled knowledge from lessons learned in the periodically published After Action Report (AAR), combined with insights from the Department of Public Health and Guam Health Laboratory, to come up with four top-priority recommendations in response to major COVID-19 challenges:

1. **Staffing:** One of the key problems on Guam (and nationwide) is that public health has been underfunded for decades as can be seen by the shrinking budget of the Centers for Disease Control and Prevention. As a result, the workforce needed to adequately address public health conditions is lacking. Necessary training, education, skills, and experience to respond to a pandemic have lapsed. A top priority during the pandemic should be to identify and develop a team of trained volunteers, assigned to GPHL, to formalize the Laboratory Emergency Response (LER) Plan to support future operations to provide long-term stability and positive progression.
2. **Limited Testing:** The amount of time required to perform testing was initially underestimated. A top priority during the pandemic should be to train, practice, and regularly evaluate the LER plan, laboratory staff, and testing capabilities in conjunction with the DPHSS Public Health Emergency Program, the Bureau of Emerging Infectious Disease, and the Bureau of Communicable Disease and Control (BCDC).
3. **Lack of Lab Information Management System:** Lab testing was under significant strain with the pandemic and a goal was identified to upgrade workstations, implement Lab Information Management System (LIMS), and modernize the information and communications technology available in the Government of Guam Office of Technology Agency to improve lab capacity.
4. **Rapid Testing Turnaround Time:** Enhance DPHSS COVID-19 testing by engaging private partners, providing training, and sharing benefits of the LER plan under the DPHSS Incident Command Medical Operations structure for both emergency and non-emergent events.

According to the AAR report, Guam experienced a minor surge of cases in March 2020. DPHSS reports that declaring a state of emergency and implementing lockdowns caused the number of new infections to decrease from May to June. Beginning in July, Guam experienced a major surge in positive cases and subsequent deaths. The cases continued to surge until vaccines were introduced in December 2020. According to the AAR report, the majority of cases as well as deaths occurred during this late 2020 surge in cases.

Pandemic Communication

Extensive interdepartmental communication, federal and local government communication, and public awareness campaigns were required throughout the pandemic. Pandemic information and directives were provided through executive orders from the Governor's office and hospitalization and fatality reports coordinated between Guam Memorial Hospital and DPHSS. Information was also distributed through public mandates and memos to guide social distancing, mandate hygiene procedures in public spaces, and promote vaccination through community public relations campaigns. Mandates and memos were released with few or no delays, and the information was also uploaded to the DPHSS COVID-19 dashboard.

Lab results were difficult to communicate and evaluate, despite the use of an existing database, ICS forms, and a SharePoint infrastructure. At first, when a new COVID-19 positive test result occurred at Guam Health Laboratory, the Surveillance Branch (former Epi/Surveillance Branch – Surveillance Unit), provided instructions and compliance details to the isolation unit, including information to refer for medical guidance if necessary. The isolation unit was also tasked to hand deliver an Isolation packet to the person who tested positive and coordinate any necessary action to ensure his or her safety while in enforced isolation. The information was passed to the Investigation Unit to begin case investigation and contact tracing. This eventually became unsustainable through the surges of summer 2020.

Medical Impact

Logistically, Guam struggled to manage COVID-19 testing, but was quick to adopt diverse testing methods to address spread of the disease. This was possible because of efficient internal communication and community cooperation. The first COVID vaccines arrived in limited quantity in December 2020.

The Guam Public Health Laboratory partnered with the Pacific Island Health Officer's Association and the CDC Foundation to prioritize hiring and training four microbiologists in order to ramp up COVID-19 testing capacity and ensure compliance with current testing standards. The efforts by the Guam Public Health Laboratory allowed the lab to grow from a staff of 5 full-time staff processing 20 tests per 8 hours in March 2020 to 11 full-time staff processing 400 tests per 8 hours by February 2021.

Widespread transportation issues and public health awareness of symptom severity resulted with many dead-on arrivals at Guam Memorial Hospital. Furthermore, members of the public were not always able to gain access to medical care. Some people were unaware of symptom severity or of their status as COVID-positive.

There were extensive supply chain issues and a shortage of Personal protective equipment (PPE) at first, but most facilities adapted and were able to obtain assistance and donations from federal and non-profit sources.

According to the Pacific Island Health Officers Association, the primary concerns throughout the pandemic were establishing sustainable testing pipelines, contact tracing, and garnering community involvement in vaccination efforts.

General Public

In their 2022 After Action Report, DPHSS indicates that low-income people in poverty in areas with higher population density suffered the most severe impacts of COVID-19. Many members of this population had poorer overall health conditions at the onset of the pandemic and were especially vulnerable to complications and death from COVID-19. Fortunately, the government of Guam was in a good position to identify vulnerable communities and could therefore prioritize vaccine distribution, community testing, and social services for those most at risk.

According to the Guam Recovery Research Project by the University of Guam, those most impacted by COVID-19 tended to be CHamoru women under age 40, which overlaps with much of the medical workforce.

At the time of this report in April of 2022, Guam has experienced about 40,000 COVID-19 cases and over 300 COVID-19 deaths since the start of the pandemic.

2.3. Emerging Trends

2.3.1. In Guam

According to the Global Burden of Diseases, Injuries, and Risk Factors Study 2019 Guam received a UHC (Universal Health Coverage) index rating of 63.8. The UHC has declined over the past 20 years. This rating articulates service coverage across population, identifying whether the population has adequate access to health care. Most countries consider a UHC score in the 80's to be 'good'. Guam's downward trend suggests that more challenges to health access are occurring.

According to the DPHSS, Guam has overall higher poverty, with a large portion of the population reliant on Medicaid and SNAP. COVID-19 has exacerbated the economic challenges to health care.

Currently, the leading cause of death and disability in Guam is chronic kidney disease, followed closely by heart disease and diabetes, according to DALYs 2019 report

According to the GUAM–WHO Country Cooperation Strategy 2018–2022, the six highest health priorities for Guam should be:

1. Workforce development
2. Modernized information technology systems
3. Organizational structure that maximizes efficiency
4. Regulatory framework that creates a health-promoting policy environment
5. Client-focused initiatives to deliver people-centered public health and social services
6. Sustainable health system design

According to the 2020 Title V Block Grant needs assessment, the island has developed significant gaps in substance abuse services, family planning services, insurance accessibility, obesity and nutrition, and safe environments for children. Guam is experiencing rising levels of diabetes, liver failure due to alcoholism, and dementia among the elderly population.

The Pacific Islander Health Officer Association's Strategic Framework for Action plan for 2018-2022 identified a strategic direction for those five years, to focus on:

- Health information management systems and surveillance
- Human resources for health
- Performance management and quality improvement
- Laboratory strengthening
- Pacific basin primary care office
- Regional policy and engagement
- Health leadership
- Health advocacy
- Health security – preparedness and response

2.3.2. Globally

There are numerous trends in health care modernization occurring globally.

A few of significant global trends in health care modernization are:

Changes in Medical Services

- Increased medical activism to address health inequalities. Health care has become increasingly political in many countries and is trending to continue with growing economic gaps and availability of medical technology and education.
- Increasing tele-doc usage. It is predicted that by 2040 most routine medical care will be conducted in-home, virtually, or in outpatient settings.
- Diagnostic and other minor medical procedures come to box stores. Many box stores like Walmart or Walgreens are equipped for routine screening procedures. This takes much of the pressure off traditional medical providers and may lead to an increase in medical specialization by ailment or anatomical region
- Wearable medical devices- Technology design has been steadily getting more portable and affordable. Advancements in medical monitoring technology and affordable three-dimensional printing has made a variety of medical apparatus more accessible and customizable.
- Organ engineering - Scientists continue to pursue ways to engineer organs. As this technology becomes more widely available, it will have an impact on medical care options and health care professions.
- A rise in prescription diets and emphasis on nutrition.
- Expansion of minor medical services at common hub stores, like Walmart and Walgreens.

Changes in Workforce

- As virtual medical services expand, there will be a greater need for technological support staff and remote contracted employees.
- Artificial intelligence or AI for data analysis and AI-assisted “smart working” will increase. Automation software for predictive analytics and integrated AI to help with logistics and routine tasks will increase. The pandemic spurred remote work into normality. There is an anticipated trend towards virtual workforces and expanded software databases to create an increasingly mobile and a more decentralized workforce.
- Baby boomer retirements. A mass exodus of specialists and upper-level personnel is going to continue to drastically upend the patient to doctor ratio in the coming years

Changes in Systems

- Agile supply chains. Sourcing continues to be one of the primary opportunities for industry advancements as a globalized economy opens sourcing with more agile shipping and transcontinental partnerships.
- Broader information technology (IT) integration. Adaptable and efficient IT systems will set apart the future leaders in medical care. Exchangeable virtual patient charts, automated systems, and personalized patient portals are increasing in popularity.
- Personalized Health Care – patients increasingly cite wanting a personal connection with their doctor is a key indicator for quality healthcare.

2.4. Survey and Data Acquisition Methodology

In 2021 and 2022, COVID-19 prevention measures prevented the usual data collection tactics involving site visits and in-person interviews. Instead, in 2022 our team researched all 120 medical businesses on Guam using old provider lists, current business listings, and Google business listings to ascertain contact information, hours of operation, and possible points of contact. These 120 businesses were then contacted three separate times by phone and email to distribute or offer assistance completing the Matrix digital survey. During this process, a few business listings were found to be duplicates, resulting in a final list of 115 existing businesses. This is more than double the 58 businesses identified in the 2012 Medical Services Delivery Plan. Out of 115 businesses, 21 had closed or disconnected their websites and phone lines, 13 had merged with another practitioner, 13 were unavailable, and 68 were willing to be contacted. Of the 68, 32 businesses participated in the survey. Respondents ranged from dental clinics to pediatricians. The responses, or lack thereof, provided a unique glimpse into Guam’s medical service access and conditions in light of COVID-19.

The original list of 120 medical service providers and their clinics was created using the Current Physicians' Listing produced by the DPHSS (updated July 2021). The list identified 518 providers, but certain providers were removed from a final survey pooling list to achieve consistency with pooling parameters used in the 2012 final report.

- 120 privately operated medical provider clinics were identified in the May 2021 Healthcare Provider List.
- Because of COVID-related health and safety risks during the reporting period, Matrix staff were restricted from conducting in-person visits to these clinics and health care providers.
- Data collection staff experienced low survey responses from health care providers. The limited return calls from providers indicated their inability to participate in a one-to-one interview with data collectors due to a lack of time and ability to commit to a scheduled survey interview. For this reason, and in light of general concern over the recent increase in public health risks, the survey was converted into an online Survey. The web-based survey was sent to providers via a website link, providing more flexibility for providers to respond to the survey without concerns about human contact. The contact information phase was completed by calling publicly listed phone numbers and asking for appropriate points of contact and other basic information. The results were compiled and reviewed by staff to ensure was no missing information.

The initial distribution phase included an introductory phone call and email using pre-approved scripts. The appropriate person was contacted, the email address confirmed, and an introductory email sent within one hour of initial contact.

The resend phase occurred several months later with any participants who did not respond initially. Matrix reached out to reconfirm contact information and re-sent emails to the preferred point of contact.

In the follow-up phase, Matrix worked to troubleshoot survey response issues, including helping providers finish incomplete surveys, identifying better points of contact, and sending a final invitation to participate to any remaining entities who had not begun the survey.

3. Public Providers

Guam has three public providers on the island: Guam Memorial Hospital Authority (GMH), Department of Public Health and Social Services (DPHSS), and Guam Behavioral Health and Wellness Center (GBHWC).

Key findings include:

- GMH is central, but a lack of transportation infrastructure means that it may be slow or difficult to access for citizens at far ends of the island to get to the building. Because large portions of the population in Guam are not central, particularly in Dededo, Private providers are relied on more heavily for more distant villages.
- There is a lack of public provider health facilities in the southern portion of Guam.

- The availability of sufficient storage space for medicines and supplies is a major problem for public provider facilities.
- GMH is experiencing high occupancy rate of acute beds
- GMH needs security upgrades for patient safety.
- Many of the public facilities are in poor condition and lack adequate or updated 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 lower by 1.4 compared to the national average, which reduces ability to meet patient demand.
- Certain departments at GMH are used for treatment that they are not specified for
- The process of procuring appropriate equipment, parts, and medicines through the Government of Guam is often slow and inefficient, with the result of lacking the necessary resources to effectively serve patients.
- Across all facilities, the shortages in qualified staff (both medical and administrative) limits the services that can be provided, the number of patients who can be treated, and the timeliness of services provided.
- The public providers on Guam suffer from shortages of qualified medical professionals in many medical specialties for several reasons, including lack of funding and recruitment problems.

3.1. Guam Memorial Hospital Authority (GMHA)

Guam Memorial Hospital Authority (GMHA) is the designated semiautonomous authority in charge of the island's only public hospital, Guam Memorial Hospital (GMH or 'the hospital').

The hospital is the primary provider of acute healthcare services, and the only provider of emergency care services for civilians in Guam, with a vision is to achieve a culture and environment of safety, provide quality patient care, meet national standards, and address the needs of the community in a fiscally responsible way.

GMHA was created in 1977 pursuant to Public Law 14-29 and operates as an autonomous agency of the Government of Guam. GMHA owns and operates the Guam Memorial Hospital facility, which is Guam's only civilian, public acute care hospital. The hospital has 161 licensed acute care beds, and 40 licensed beds at the Skilled Nursing Unit (SNU) facility in the village of Barrigada. GMHA is supported by six divisions – Administration, Operations, Fiscal Services, Medical Services, Nursing, and Professional Support. The hospital's goal is to provide healthcare services to all patients regardless of their ability to pay. Services include:

- inpatient adult acute,
- skilled nursing, maternal child health,
- rehabilitative, laboratory,
- radiology,
- and respiratory care.

The hospital's medical specialties include:

- cardiac catheterization lab,
- intensive care/critical care unit,
- emergency room, urgent care,
- interventional radiology,
- labor & delivery,
- obstetrics, nursery,
- neonatal ICU,
- pediatric ICU,
- medical telemetry/progressive care unit,
- and operating room/post-anesthesia care unit.

GMHA added “Care” Units and telemedicine services in the early stages of Guam’s 2019 novel coronavirus (COVID-19) public health emergency to treat COVID-19 patients at different levels of care.

Since September of 2015, GMHA also provides outpatient medical services to Department of Corrections (DOC) detainees and inmates pursuant to a cooperative agreement designed to comply with a court order related to a federal civil case. Inpatient services are not included in this agreement and are billed to DOC as detainees and inmates are hospitalized. DOC is required to remit payments for clinical services subject to legislative appropriations.

3.1.1. Staff

GMHA is governed by a Board of Trustees representing backgrounds in healthcare, allied health, nursing, medicine, management, and finance. The board is appointed by the Governor of Guam with the advice and consent of the Guam Legislature. Trustees serve staggered six-year terms. In September 30, 2021, there were nine members appointed to the GMHA board. The GMHA Volunteers Association, a non-profit organization that supplements the professional staff, is presided over by an ex-officio member of the board.

GMHA’s Chief Executive Officer/Administrator is hired by the board to have full charge and control of the operations and maintenance of the hospital. The CEO is responsible for ensuring GMHA meets its strategic goals. There has been a decline of physician staff at GMHA, resulting in a shortage, in recent years. *The number of GMHA’s medical staff, primarily physicians, has steadily declined.* This decline in physicians has been credited in part to financial problems at GMHA 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.

3.1.2. Hospital Units and Services

As of this report, outpatient services at GMHA include Emergency Medicine Department (EMD), Operating Room (OR), Radiology, Respiratory Care and Rehabilitative Services, and a Laboratory. GMHA 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 hospital's primary care units are:

- Covid Care Units
- Emergency Room
- Hemodialysis
- Intensive Care Unit / Critical Care Unit
- Labor and Delivery
- Medical Surgical Unit
- Nursery/Neonatal Intensive Care Unit
- OB /Maternity Ward
- Operating Room / Post Anesthesia Care Unit
- Pediatrics Ward/Pediatrics Intensive Care Unit
- Skilled Nursing Unit
- Surgical Unit
- Telemetry / Progressive Care Unit

GMHA provides a wide variety of services for both inpatient and outpatient care for adults and children.

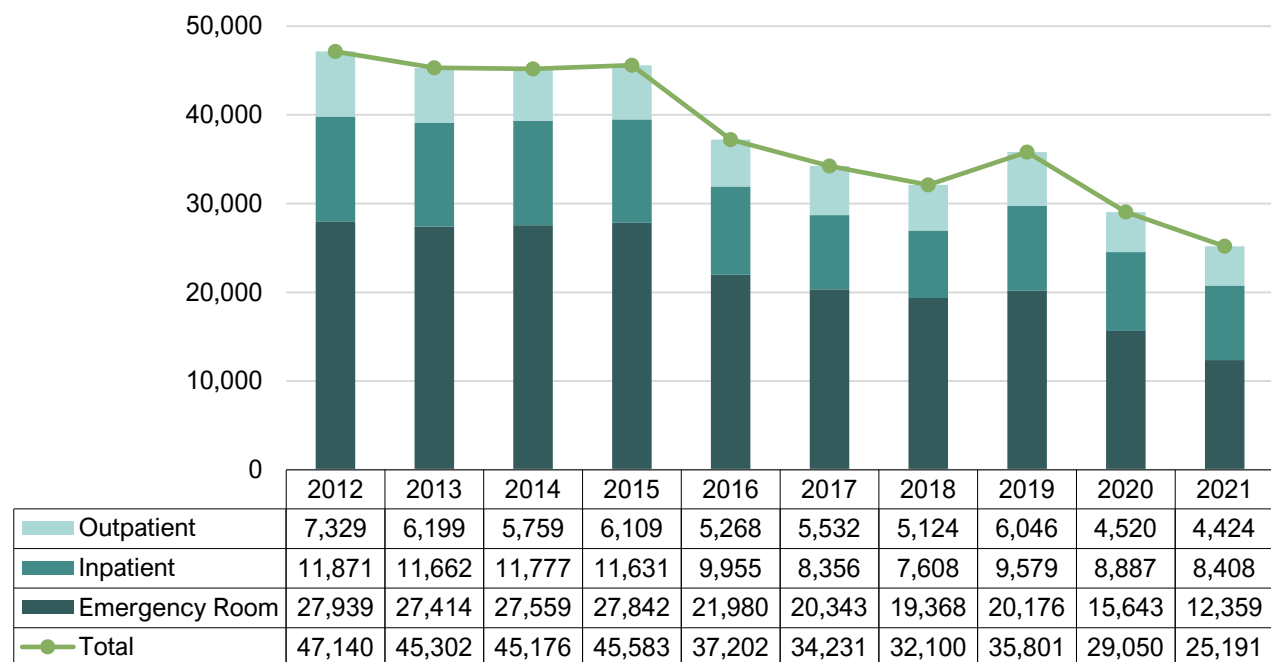
- 24-hour emergency room and services,
- Cardiac catheterization lab
- Operating room, Operating Room/Post Anesthesia Care Unit
- Medical-Surgical Unit
- Labor & delivery, obstetric/maternal ward, nursery,
- intensive care /critical care (neonatal, pediatric, and adult),
- Telemetry/Progressive Care unit
- Skilled nursing care,
- Inpatient renal dialysis, Hemodialysis
- Radiology/interventional radiology: X-Rays, angiography, fluoroscopy, biopsies, ultrasounds, Computed Tomography
- CT scan,
- EEG / EKG / EMG lab
- Special Services: electrocardiogram (EKG) Transthoracic Echocardiogram (TTE), Permanent Pacemaker insertion (PPM), Coronary Angiogram, PTCA (Balloon Angioplasty), PCI (Stent Placement)
- Gastroenterology, med
- MRI (Not currently operational due to damaged equipment),
- Neurosurgery, med
- Nuclear medicine (Not currently operational due to inadequate personnel and equipment), pro
- Gynecological surgery, med
- Ear / Nose / Throat surgery
- Orthopedic & hand surgery,
- Plastic surgery,
- Post anesthesia care unit,
- Thoracic surgery,
- Vascular surgery,
- Mammography (Not currently operational due to damaged equipment),
- Laboratory and blood bank,
- Telemetry-progressive care,
- Respiratory care,
- Physical, occupational, and recreational therapy, Rehabilitative Care (REHAB)

- Dietary services,
- Social services,
- Pastoral care and Chapel, (Amenities: Closed until further notice)
- Patient education, and Medical library,
- Pharmacy

3.1.3. Patient Trends

While the hospital's primary service market has always been 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).

Most recently, the overall patient census declined by 13.3% to 25,191 in FY 2021 from 29,050 in FY 2020 due to the Hospital's intermittent closure of outpatient services. This was due to COVID-19 and decreases in ER visits. Specifically, inpatient census decreased 5.4%, outpatient decreased 2.1%, and ER decreased 5.3%.



*Emergency Room includes Urgent Care; Inpatient includes SNF

In FY 2021, GMHA experienced favorable inpatient and unfavorable outpatient volume growth compared to FY 2020. Inpatient days increased 10.6% from FY 2020 and inpatient admissions decreased 5.4% indicating patients were in the Hospital longer than the previous year. Outpatient visits decreased 16.8% , including urgent care visits (-73.1%) and emergency room visits (-5.3%). GMHA provides a proportionately high number of inpatient services to outpatient services, particularly for patients under Medicare, Medicaid, and the Medically Indigent Program.

3.1.4. Financial Highlights

Overview of the Financial Statements

A comparative analysis is provided for FY 2021 and FY 2020 Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, and Statements of Cash Flows.

Table 1. Summarized Statement of Net Position

	FY 2021	FY 2020	FY 2019	Change FY 2020 to FY 2021	% Change FY 2020 to FY 2021
ASSETS					
Current Assets	\$ 49,173,247	\$ 52,694,890	\$ 54,522,698	\$ (3,521,643)	-6.7%
Noncurrent Assets	\$ 31,07,333	\$ 27,939,968	\$ 29,612,222	\$ 3,067,365	11.0%
Total Assets	\$ 80,180,580	\$ 80,634,858	\$ 84,134,920	\$ (454,278)	-0.6%
Deferred Outflows of Resources	\$ 88,710,148	\$ 64,357,589	\$ 27,988,294	\$ 24,352,559	37.8%
Total Assets and Deferred Outflows of Resources	\$ 168,890,728	\$ 144,992,447	\$ 112,123,214	\$ 23,898,281	16.5%
LIABILITIES AND NET POSITION					
Liabilities:					
Current liabilities	\$ 24,206,143	\$ 23,350,315	\$ 21,109,038	\$ 855,828	3.7%
Noncurrent liabilities	\$ 336,731,116	\$ 320,789,090	\$ 266,182,235	\$ 15,942,026	5.0%
Total liabilities	\$ 360,937,259	\$ 344,139,405	\$ 287,291,273	\$ 16,797,854	4.9%
Deferred inflows of resources	\$ 63,602,191	\$ 48,043,389	\$ 61,804,406	\$ 15,558,802	32.4%
Net position:					
Net investment in capital assets	\$ 31,007,333	\$ 27,939,968	\$ 29,612,222	\$ 3,067,365	11.0%
Unrestricted	\$ (286,656,055)	\$ (275,130,315)	\$ (266,584,687)	\$ (11,525,740)	4.2%
Total net position	\$ (255,648,722)	\$ (247,190,347)	\$ (236,972,465)	\$ (8,458,375)	3.4%
Total liabilities, deferred inflows of resources and net position	\$ 168,890,728	\$ 144,992,447	\$ 112,123,214	\$ 23,898,281	16.5%

GMHA's total net position decreased by 3.4%, or \$8.4M, in FY 2021 compared to FY 2020 increasing GMHA's cumulative deficit in unrestricted net position.

Total assets decreased 0.6%, or \$0.4M, due to decreases in cash of \$8.9M from increased expenses and increase in net patient accounts receivables from decreased collections. Generally accepted accounting principles (GAAP) allow the recognition of an allowance for doubtful accounts and the periodic write-off of outstanding receivables meeting certain criteria. GMHA ended FY 2021 with patient receivables of \$39.7M, net of estimated uncollectible accounts of \$216.2M. Capital assets increased by \$3.0M from purchases of capital equipment from COVID-related federal relief funds. Deferred outflows

of resources increased by \$24.3M for pensions and other post-employment benefits, resulting in an overall increase in total assets and deferred inflows of resources of \$23.9M.

Total liabilities increased 4.9%, or \$16.8M, due to increases in other post-employment benefits (OPEB) liability of \$7.7M, net pension liability of \$7.1M, and trade accounts payable of \$4.2M.

Current liabilities increased 3.7%, or \$0.9M, mainly due to increases in trade accounts payable from reduced cash flow. This was offset by reduction in accrued payroll of \$1.1M and amounts owed to Medicare by \$2.0M. In FY 2020, GMHA received \$4.5M in COVID-19 Accelerated and Advance Payments from the CMS. In FY 2021, CMS began recouping the payment from claim remittances at a rate of 25%. The balance owed to CMS at September 30, 2021 is \$2.5M.

As of September 30, 2021, GMHA's investment in capital assets was \$31.0M with no long-term debt. Major FY 2021 capital improvement additions include \$0.5M to relocate the Communications Center from the Z-Wing and \$6.4M in movable equipment such as Rapid Equipment Deployment Initiative (REDI) kits for critical care patient monitoring, mobile C-Arm imaging machines, vital signs monitors, beds, and infusion pumps.

Table 2. Summarized Statements of Revenues, Expenses, and Changes in Net Position

	FY 2021	FY 2020	FY 2019	Change FY 2020 to FY 2021	% Change FY 2020 to FY 2021
Total Operating Revenues	\$ 110,961,397	\$ 94,362,706	\$ 100,348,300	\$ 16,598,691	17.6%
Total Operating Expenses	\$ 180,682,147	\$ 145,572,873	\$ 130,818,008	\$ 35,109,274	24.1%
Operating Loss	\$ (69,720,750)	\$ (51,210,167)	\$ (30,469,708)	\$ (18,510,583)	36.1%
Total Non-operating Revenues	\$ 60,484,470	\$ 39,241,585	\$ 38,827,024	\$ 21,242,885	54.1%
Total Non-operating Expenses	\$ (83,983)	\$ (336,817)	\$ (194,287)	\$ 252,834	-75.1%
Total Capital Grants and Contributions	\$ 861,888	\$ 2,087,517	\$ 1,049,864	\$ (1,225,629)	-58.7%
Change in Net Position	\$ (8,458,375)	\$ (10,217,882)	\$ 9,212,893	\$ 1,759,507	17.2%

GMHA's FY 2020 operating revenues increased by \$16.6M, or 17.6%, due to increases in net patient revenue. Other revenue of \$2.5M decreased nominally and includes \$2.1M billed to DOC for medical care provided to detainees and inmates in the DOC Clinic. All amounts billed to DOC in FY 2021 and FY 2020 was collected. In FY 2019, a \$1.7M provision for uncollectible DOC billings was recorded for amounts owed prior to FY 2018 because DOC did not include a budget for these payments.

Operating expenses increased 24.1%, or \$35.1M due to increases in expenses to prevent, prepare for, and respond to COVID-19. These expenses were for contract travel nurses, physicians, and medical supplies. Nursing expenses increased significantly by \$23.9M mainly due to costs to hire contract travel nurses urgently needed to help provide medical care to COVID-19 patients. Professional Support

division expenses rose by \$5.1M due to increases in supplies and materials including pharmaceutical purchases.

Personnel costs increased overall by \$7.6M due to increased costs for salaries of \$3.1M and benefits of \$3.8M for additional staff hiring and other pay of \$0.9M. Other pay includes certification pay for GMHA's certified allied health professionals and incentive pays for nurses. Another contributing factor to increases in other pay was GMHA's implementation in April 2020, of COVID-19 response differential pay for essential GMHA employees supporting the public health emergency per the Governor's Executive Order No. 2020-08. GMHA incurred \$3.3M in FY 2021, for such differential pay of which \$0.3M was reimbursed by its \$11.9M budget allocation from the Government of Guam's \$118.0M Coronavirus Relief Fund and \$1.5M was applied to Provider Relief Funds received by GMHA. The remaining \$1.5M was paid through GMHA operations funds. In FY 2020, COVID-19 differential pay amounted to \$3.6M, of which \$0.2M was applied to PRF and \$3.4M was reimbursed by GovGuam Coronavirus Relief Fund.

Non-operating revenues increased 54.1%, or \$21.2M due to an increase in federal grants of \$19.9M including \$10.3M in federal public assistance for contract travel nurses, \$7.3M in American Rescue Plan funds, and \$1.6M in GovGuam Coronavirus Relief Funds. GMHA's subsidy transfers increased by \$1.3M, from \$31.5M in FY 2020, to \$32.8M in FY 2021.

Capital grants from the federal government decreased by \$1.0M.

Table 3. Summarized Statement of Cash Flows

	FY 2021	FY 2020	FY 2019	Change FY 2020 to FY 2021	% Change FY 2020 to FY 2021
Net cash used for operating activities	\$ (57,724,361)	\$ (38,214,352)	\$ (28,725,127)	\$ (19,510,009)	-51.1%
Net cash provided by noncapital financing activities	55,027,844	45,634,650	34,957,341	9,393,194	-20.6%
Net cash (used for) provided by capital and related financing activities	(6,191,275)	31,595	(2,801,630)	(6,222,870)	19,695.7%
Net change in cash	(8,887,792)	7,451,893	3,430,584	(16,339,685)	219.3%

Net change in cash decreased \$16.3M from FY 2020.

Net cash used for operating activities increased \$19.5M due to a \$17.7M increase in payments to suppliers and contractors.

Net cash provided by noncapital financing activities increased \$9.4M due to increases in federal grants of \$13.5M and transfers from the Government of Guam of \$2.1M.

Net cash used for capital and related financing activities increased \$6.2M due to acquisitions of capital assets.

GMHA is reimbursed at a higher rate for outpatient services than inpatient services. In FY 2021, 16.5% of gross revenues were attributed to outpatient services. GMHA management is exploring opportunities to increase outpatient hospital services. However, this will require substantial investment in capital improvements as well as securing professional staff to support expanded services.

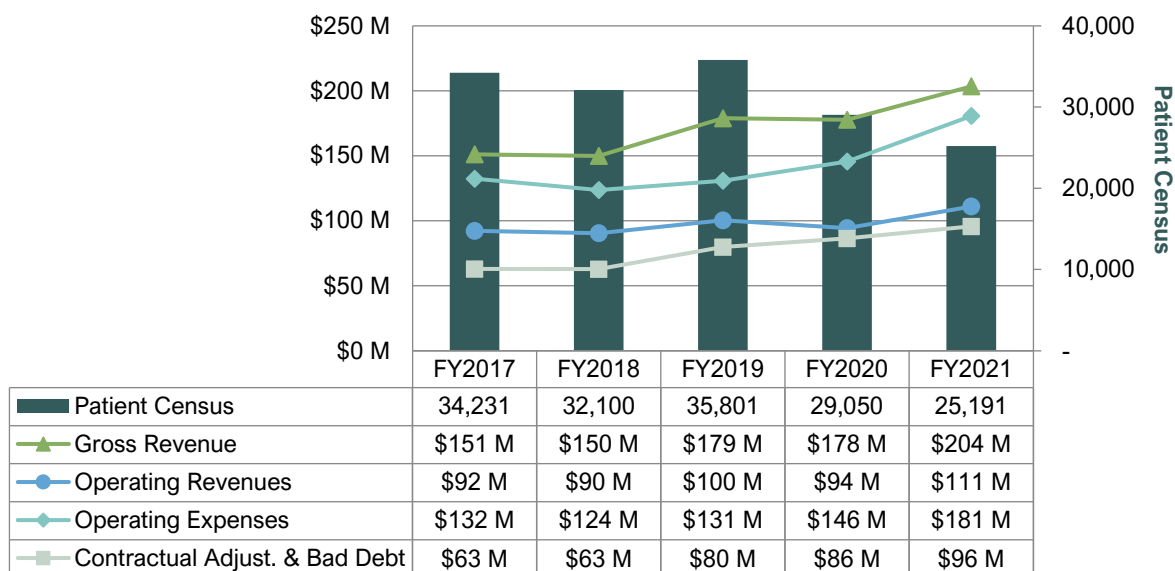
	FY 2021	FY 2020	FY 2019	Change FY 2020 to FY 2021	% Change FY 2020 to FY 2021
Inpatient Days	48,363	43,727	48,456	4,636	10.6%
Bed Occupancy Rate	65.9%	59.6%	66.0%	-	6.3 pp
Inpatient Admissions	8,408	8,887	9,579	-479	-5.4%
Total Outpatient Visits*	16,783	20,163	26,222	-3,380	-16.8%
Emergency Room Visits	11,386	12,029	14,894	-643	-5.3%
Urgent Care Visits	973	3,614	5,282	-2,641	-73.1%

*Includes Emergency Room & Urgent Care

Increased Net Patient Revenues

Net patient revenues increased \$16.5M, or 18.2%, to \$107.8M in FY 2021 compared to FY 2020. Similarly, gross revenues increased 14.5%. GMHA favorably adjusted the allowance for uncollectible accounts for third party payers due to improved collections. However, the allowance for 3M's and self-pay was increased.

Revenues, Expenses, & Patient Census

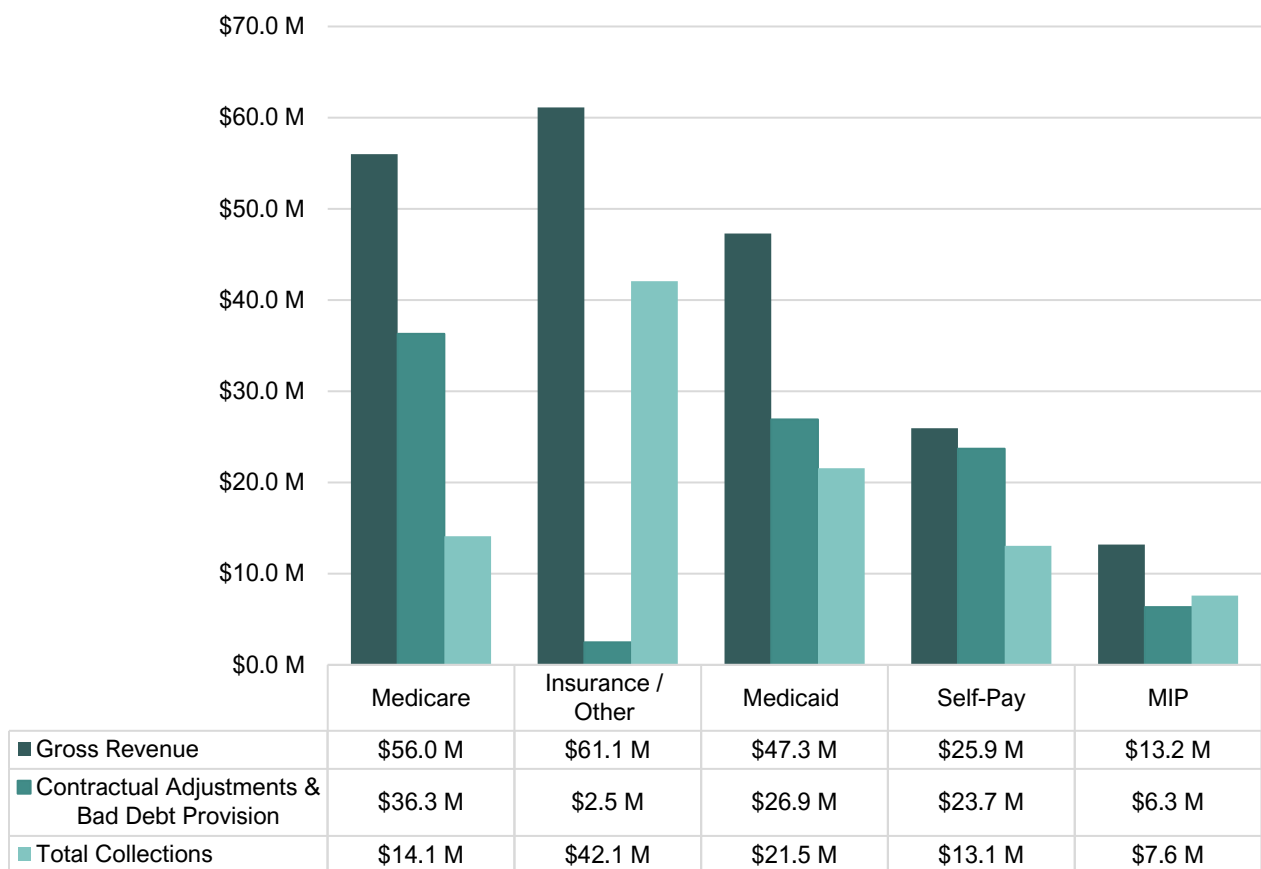


Collections decreased by 5.8%, or \$6.0M, from \$104.4M in FY 2020 to \$98.3M in FY 2021. Collections from the 3M's were \$43.2M compared to \$59.2M in FY 2020, a decrease of 27.0%, or \$16.0M. Collections from third-party payers increased 5.8%, or \$2.3M, while self-pay collections decreased

\$7.6M, or 140.9%. Decreased collections are attributed to the increase in patient admissions covered by the 3M's wherein GMHA is paid a per diem rate for these patients.

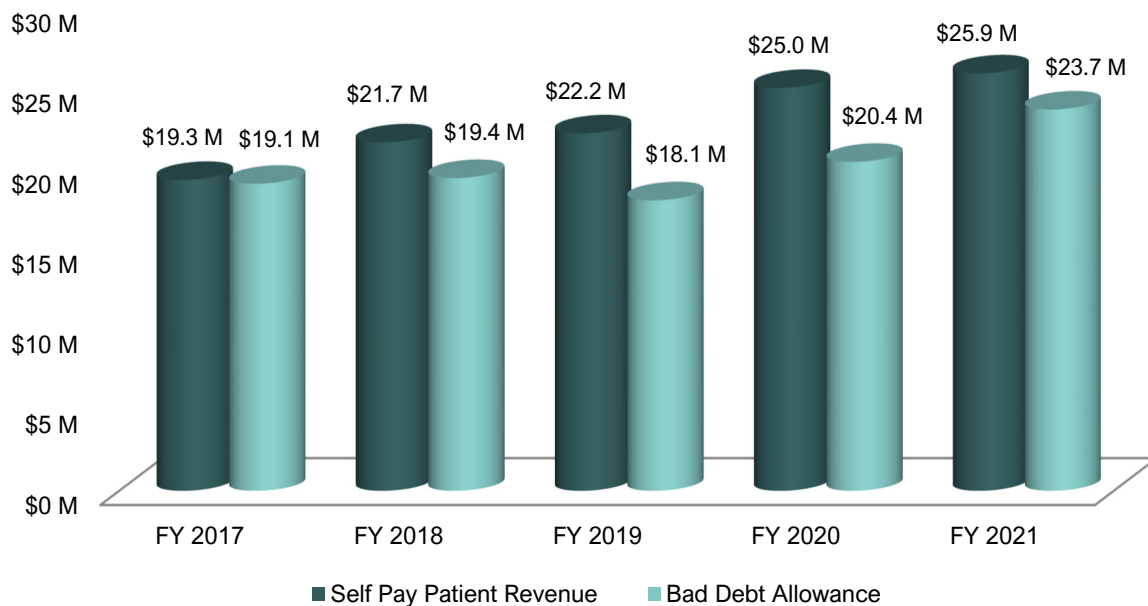
GMHA continues its partnerships with the Office of the Attorney General (OAG) for collection referrals and the Department of Revenue and Taxation (DRT) for garnishments. In addition to collaborations with OAG and DRT, GMHA continues to seek ways to improve collections, including offering patients an online payment system since FY 2017.

FY 2021: Gross Billing, Contractual Adjustments, Bad Debt Allowance and Collections



GMHA's mandate to provide healthcare to all patients regardless of one's coverage or ability to pay has resulted in the continual growth of patient receivables. For the last five years, self-pay patients received an average of \$22.8M of care per year and the likelihood of collecting these accounts is low and GMHA's provision for bad debts averaged \$18.2M a year. This means that GMHA expects to collect an average of 20 cents per dollar billed to self-pay patients.

Self-Pay Revenue and Bad Debt Allowance



In October 2018, to reduce the level of uncompensated care, GMHA hired an Eligibility Specialist in collaboration with the Department of Public Health and Social Services, to assist the uninsured and underinsured apply for and obtain Medicaid or MIP coverage. This effort is an ongoing project involving GMHA patient registration staff, social workers, case managers, and Americorps. In FY 2021, Medicaid patients accounted for 23% of GMHA’s payer mix, an increase from FY 2020, which was 21% and self-pay patients reduced to 13% from 14% in FY 2020.

3.1.5. COVID-19

Achieving and Sustaining a Successful COVID-19 Response and Recovery

Since March 2020, GMHA has been at the forefront of Guam’s response to the health emergency as the designated facility to provide medical services to COVID-19 patients. The public health emergency continued into 2022, and despite challenges GMHA faced with little data, experience, or specialized guidance on the management of COVID-19, the hospital managed hundreds of COVID-19 patients and went on to receive prestigious accolades for its extraordinary pandemic response. In May 2021, GMHA won - Hospital of the Year and COVID Management Initiative of the Year on Guam at the Healthcare Asia Awards. These awards signify several achievements during the pandemic, including developing optimized COVID-19 protocols, establishing critical care telemedicine services, creating committees dedicated to clinical management of COVID-19 patients, and distributing various communication products to ensure continuous and thorough updates to all Hospital departments.

Pandemic-related Staffing Shortage

The first surge of COVID-19 patients started in August 2020 and lasted until January 2021, overwhelming the hospital staff and resources. During this time, there were as many as 88 COVID-19 positive patients a day. The hospital experienced a second surge in COVID-19 cases from August 2021 to March 2022.

GMHA's initial response to the pandemic required major redesign and retrofitting of the hospital but the surges placed the Hospital in a precarious staffing situation. GMHA formed a partnership with the Department of Defense's Medical Mission Assignment physician ICU staff and critical care nurses, which managed augment GMHA's organic staffing from September 2020 to January 2021. In late August 2020, GMHA sought additional contract travel nurses to staff COVID Care Units. By this time, market rates throughout the nation had skyrocketed to unprecedented amounts. In 2021, GMHA sought federal funding support for contract travel nurses and hired a total of \$20.0M worth of labor from two companies. Of the total costs, \$11.0M was federally funded and \$9.0M was funded by GMHA operations funds. GMHA is currently pursuing federal reimbursements for these amounts.

To decrease reliance on costly contract travel nurses, in June 2021, Governor Lou Leon Guerrero authorized the Nurse Professional Pay Structure and Differential giving GMHA the means to retain and grow its pool of organic nurses. In September 2021, the board approved a working differential for certified and licensed laboratory technologists and respiratory therapists. The estimated cost increase will be \$7.1M annually.

GMHA also offers pay incentives to certified and licensed health professionals such as registered nurses; licensed practical nurses; nurses specializing in emergency room, hemodialysis, and critical care; and other allied health professionals. In response to the pandemic, GMHA partnered with University of Guam to hire Certified Nurse Assistant students through a fast track program wherein the students complete their practical training at the Hospital. These measures are strategies to recruit and retain these difficult-to-fill positions that are critical to patient care and to address the Hospital's ongoing nursing and allied health professional shortage. While hospitals across the country are bearing consequences from severe pandemic-related labor shortages and resorting to limiting services and closing units, the Hospital continues to provide much needed care to all patients.

Telemedicine Technology

In January 2021, GMHA sought partnerships with healthcare providers from abroad to bring telemedicine technology via Rounders that deliver the life-size physician in real time care to critical care patients. The concept was born out of necessity due to the number of COVID patients in the Hospital and limitations in specialized critical care physicians. Physical Rounders allows physicians to assess and treat patients virtually with a hi-definition television. Telemedicine providers are assisted by locally hired telemedicine technicians and nurses that collect and transmit patient data to the physicians.

Vaccine Administration and COVID-19 Therapeutics

In December 2020, GMHA began administering COVID-19 vaccinations to Hospital staff and patients including inmates at the Department of Correction clinic, and eligible community members. In August 2021, the vaccinations were mandated per Executive Order 2021-17 and unvaccinated staff were required to be tested for COVID-19 weekly by the Employee Health Services department. Shortly thereafter, the Centers for Medicare and Medicaid (CMS) mandated vaccinations for hospitals that receive Medicare funding. The Hospital staff's vaccination rate is currently 98%.

In February 2021, GMHA began administering monoclonal antibodies to patients and in September 2021, the Infusion Outpatient Clinic opened to administer monoclonal antibody infusion therapies to COVID-19 patients.

Other activities related to achieving and sustaining a successful COVID-19 response and recovery in FY 2021 include:

- Implemented daily health and wellness checks for GMHA staff via Sara Alert.
- Completed Care 2 unit (ICU overflow) electrical upgrades for enhanced COVID-19 response and recovery.
- Collaborated with the U.S. Army Corps of Engineers to complete the FEMA-approved electrical and mechanical upgrade project for Care 3 and Care 4 units to accommodate additional medical equipment, such as hemodialysis machines.
- Upgraded and expanded telemetry monitoring capacity in Care units throughout the Hospital.
- Purchased C-Arms for advanced diagnostic imaging providing much needed technology for vivid imagery for minimally invasive patient procedures.

Although COVID-19 surges lulled from February to August 2021, the Hospital experienced a rise in non-COVID patients. These patients presented with ailments that may have resulted from not seeking regular primary care and falling behind on their maintenance visits which worsens their medical condition.

COVID-19 Financing

In December 2020, GMHA was awarded \$15.3M in FEMA grant public assistance for an Alternate Care Site "Warm Site" to establish the Skilled Nursing Facility as a temporary expanded medical facility to maximize response capacity and capability. However, FEMA has subsequently determined that the project plan as submitted is not feasible for immediate utilization. In February 2022, FEMA conditionally approved a revised scope of work for the Alternate Care Site to include isolation of the B-Wing for SNF residents. (Yuka comments 4/1/2022)

To provide financial relief caused by increased expenses due to COVID-19, GMHA received several allocations of federal assistance.

In September 2021, GMHA received \$7.3M from the Coronavirus State and Local Fiscal Recovery Funds, established under the American Rescue Plan Act, passed through from the government of Guam

(GovGuam). The funds were marked to mitigate the negative economic impacts of COVID-19 on the Hospital's operations. GMHA applied this grant to outstanding accounts payable over 90 days old.

In June 2021, GMHA received \$1.9M from the Department of Interior Technical Assistance Program through from GovGuam for contract medical staffing for physicians and nurses.

From April 2021 to June 2021, GMHA received \$10.3M from the Office of Homeland Security for the FEMA Public Assistance Program for COVID-19 Surge Medical Staffing contract travel nurses assigned to COVID Care units in the Hospital.

From November 2020 to March 2021, GMHA received \$5.6M from its \$11.9M budget allocation of GovGuam's \$118.0M Coronavirus Relief Fund distribution to states, territories, local and tribal governments authorized by the Coronavirus Aid, Relief, and Economic Securities Act (CARES Act). The funds were budgeted for GMHA's projected expenses for physicians, supplies, payroll, and projects to upgrade capacity for negative pressure and hemodialysis and expand the patient monitoring system. In FY 2020, GMHA received \$2.4M for payroll expenses and \$910k was transferred to the Guam Homeland Security/Office of Civil Defense to procure critical equipment. The \$3.0M remaining balance of the \$11.9M allocation was reprogrammed by GovGuam to other accounts thereby exhausting the GMHA account.

In December 2020, GMHA received \$2.0M in direct CARES Act funding from the U.S. Department of Health and Human Services (HHS) through the Provider Relief Fund (PRF) for immediate cash relief to U.S. hospitals. Distributions in the prior year amounted to \$7.8M. A subsequent distribution of \$1.1M was received in November 2021.

FY 2020 PRF Distributions:	
Phase 1 General Distribution	\$ 965,170
Phase 2 General Distribution	\$ 1,084,559
Rural Relief Fund	\$ 5,502,276
Skilled Nursing Facility Relief Fund	\$ 155,000
Skilled Nursing Facility Infection Control Relief Fund	\$ 70,900
Total FY 2020 PRF distributions	\$ 7,777,905
FY 2021 PRF Distributions:	
Phase 3 General Distribution	\$ 1,961,999
Total FY 2021 Distributions	
Total PRF Distributions FY 2020 & FY 2021:	\$ 9,739,904

In April 2020, GMHA received \$4.5M through the Medicare Accelerated and Advance Payment Program to provide immediate funds for initial COVID response as authorized in the CARES Act. In April

2021, CMS began recouping the \$4.5M by withholding 25% of GMHA remittances for Medicare claims. As of September 30, 2021, CMS recouped \$2.0M from Medicare remittances.

3.1.6. Hospital Accreditation

In July 2010, GMH earned full Joint Commission accreditation after losing it in 1983. 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.

This accreditation was lost again in 2018. In June 2021, GMHA management decided to engage with the Center for Improvement in Healthcare Quality (CIHQ) to begin their process of accreditation. CIHQ's accreditation most closely resembles and aligns with the standards and Centers for Medicare and Medicaid Services' Conditions of Participation. Accrediting Organizations that work with hospitals accepting Medicare and Medicaid funding must apply for a deeming authority from the Department of Health and Human Services. GMHA is confident in CIHQ, as it has been granted by HHS the maximum deeming authority length of 6 years. GMHA plans to undergo mock surveys in FY 2022.

The accreditation does not include the off-site Skilled Nursing Facility, which has different accreditation guidelines as a long-term care facility.

GMHA holds several other certifications and accreditations, including certification by the US Centers for Medicare and Medicaid Services. In May 2021, Centers for Medicare and Medicaid Services (CMS) conducted a full recertification, revisit, and complaint survey. CMS surveys are conducted to determine GMHA's compliance with applicable CMS Conditions of Participation for a provider of hospital services in the Medicare program. CMS also conducted surveys in February, April, and August 2019, and January 2020. GMHA responded with its Plan of Corrective (POC) actions within 10 calendar days of the surveys, hence, GMHA continues to maintain its Medicare provider certification from CMS. GMHA must submit credible documentation evidencing correction of all cited deficiencies or risk termination of the Medicare provider agreement.

The hospital's laboratory is accredited by the College of American Pathologists, and the blood bank is registered with the US Food and Drug Administration. All GMHA Nurses are held to standards that are in accordance with the American Nurse Association (ANA)/Guam Nurses Association (GNA) Code of Ethics and Guam's Nurse Practice Act, as implemented and enforced by the Guam Board of Nurse Examiners (GBNE). The ANA/GNA code of ethics provides a professional guide to nurses of all disciplines and degrees nationally.

3.1.7. Staff

The hospital has approximately 609 clinical staff and 598 non-clinical staff.

FY 2022 Total Clinical Staff	609
Total non-Clinical Staff	598
Total Clinical and Non-clinical Staff	1207
GMHA 2022 Staff:	
Clinical (licensed)	591
Clinical (non-licensed)	201
Non-Clinical	390
GMH DOCs (as of 2022):	
Clinical (licensed)	18
Clinical (non-licensed)	4
Non-Clinical	3
Total Medical Staff	3,621

Overall, GMHA's full time equivalent (FTE) staff count was 1,124 at September 30, 2021, increasing by 17 FTEs. FY 2021 budgeted FTEs is 1,265. Since FY 2019, GMHA increased staffing by 9.6% primarily to increase resources to support GMHA's response to COVID-19 with notable increases in Nursing.

	FY 2021	FY 2020	FY 2019	Change FY 2020 to FY 2021	% Change FY 2020 to FY 2021
Nursing staff	540	512	468	72	15.4%

Clinical Specialty	Board Certified	Total Provider	Non Certified	% of Board Certified
Anesthesia	4	4	0	100%
Cardiology	5	5	0	100%
Certified RN Anesthesia	4	4	0	100%
Certified RN Midwife	5	5	0	100%
Emergency Medicine	19	25	6	76%
Endocrinology	2	2	0	100%
Family Medicine/Practice	4	4	0	100%
General Surgery	12	12	0	100%
Hand Surgery	2	2	0	100%
Hematology/Oncology	1	1	0	100%

Clinical Specialty	Board Certified	Total Provider	Non Certified	% of Board Certified
Infectious Disease	1	2	1	50%
Internal Medicine	39	43	4	91%
Nephrology	8	8	0	100%
Neurosurgery	2	3	1	67%
Obstetrics & Gynecology	6	11	5	55%
Oral/Maxillofacial Surgery	0	1	1	0%
Orthopedics	2	3	1	67%
Otolaryngology	2	2	0	100%
Pathology	2	2	0	100%
Pediatrics Cardiology	1	1	0	100%
Pediatrics Intensive Care	0	0	0	#DIV/0!
Pediatric Pulmonology	1	1	0	100%
Pediatrics	36	39	3	92%
Physician Assistants	2	2	0	100%
Plastic Surgery	1	1	0	100%
Podiatry	2	2	0	100%
Pulmonary Disease/Critical Care	0	1	1	0%
Radiology	17	19	2	89%
Urology	1	3	2	33%
Anesthesia	4	4	0	100%
TOTAL	181	208	27	87%

3.1.8. Planned Improvements and Updates

GMHA is working towards several improvements and updates. According to their 2020 Citizen Centric Report, the hospitals' current strategic goals focused on:

1. Achieving financial stability
2. Developing leadership team development
3. Establishing and sustain safety and quality culture
4. Training & education, assessment, development, and implementation
5. Capital improvement planning and implementation

The hospital issued a request for proposals to manage revenue cycles and monitor/track cost saving opportunities in 2020, in the hopes of achieving financial stability.

Electronic Health Records Improvements

In December 2019, GMHA embarked on a project to transition from the current Cantata Health Optimum IMED Clinical System to Medsphere CareVue Electronic Health Record (EHR) system by May

2021. After Medsphere implementation officials conducted an initial site visit in January 2020, the COVID-19 pandemic public health emergency was declared requiring the project to be implemented remotely. With unpredictable COVID-19 surges occurring in FY 2021, the project had stalled as the subject matter experts needed to build and decide workflows had to prioritize patient care. The go-live date is now scheduled for August 2022 followed by go-live of the accompanying accounting system in October 2022.

The new EHR is certified electronic health record technology (CEHRT) to meet the requirements of the CMS Promoting Interoperability Program. The program advocates the advancement of CEHRT utilization, further reduces burden, and increases interoperability and patient access to their health information. The new EHR affects GMHA's ability to benefit from monetary incentives and comply with conditions required for participation as a provider of services reimbursable by Medicare and Medicaid. The EHR will also improve process flows for documentation and add efficiencies to GMHA's current processes. These efficiencies are expected to improve charge capture and billing. GMHA is working towards full implementation of Pyxis medication management system.

Training Improvements

In 2020, the hospital developed a training needs survey for internal staff to evaluate training needs within the hospital. A few improvements are planned, including:

Compliance Office Trainings:

- Interim Life Safety Measures (All GMHA Staff)
- Proper Use of Medical Equipment (Nursing, Respiratory, Radiology, Laboratory, Special Services, Rehabilitative Services)
- Violence in the Workplace (All GMHA Staff)
- CMS Expectations for Protocols and Standing Orders (All Clinical and Medical Staff)
- CMS Requirements for Contract Services (Contract Owners, Executives)
- QAPI from a CMS Point of View (Department Managers and QAPI representatives)
- IC Annual Online Training for Clinical Staff Disinfection of Noncritical Patient Care Equipment
- Employee Probationary Monthly Evaluation
- Employee Work Planning
- Patient Sitter Orientation Online Training
- 2020 Licensed Nursing Staff Updates and Review: Restraints, NCPs, Surgical Site Care, Central Lines, Physician Orders On-Line Training
- 2020 Update: Skin and Wound Care, Assessment and Management On-Line Training
- 2020 CLABSI Prevention On-Line Training
- Nursing Staff NIHSS (Stroke Scale) On-Line Training
- 2019 – Infection Control Annual Fair Online Makeup Training
- 2019-2020 Influenza Response, Testing and Vaccination
- 2019 Tuberculosis Update, Measles Advisory

- Highlighting the Importance of Wound and Pressure Injury Management
- 2019 Non-Licensed Wound and Pressure Injury Management
- Lippincott Solutions General Users Guide
- Lippincott Procedures
- Management of Patient with Chest Drainage Unit Online Exam
- 2018 Nursing Licensed Skills Fair Part 1
- Nursing Careplan Training Video
- 2018 Fall Prevention Program Hospital-Wide Training
- 2018 Malignant Hyperthermia
- 2018 Guidelines for Care Suicide Precautions
- GMHA General Orientation Team STEPPS Online Training Part 1 for Clinical Staff Only
- GMHA General Orientation Team STEPPS Online Training Part 2 for Clinical Staff Only
- 2017 Optimum IMED Updates for Go-Live Online Exam
- HIPAA Privacy and Security Online Training/Testing

Employee Educational Resources and Training:

- Doc Sanchez Scholarship for Government of Guam Employees
- Annual AHA/AAP Calendar of events

Pre-course Letters:

- ACLS Heartcode Precourse Letter 2022
- BLS Accelerated Heartcode Precourse Letter 2022
- BLS Initial Precourse Letter 2022
- NRP HOW TO LETTER 2022
- PALS Heartcode Precourse Letter 2022

Online Video Tutorials:

- GMHA Heparin Drip Update 2020
- 2018 GMHA Anticoagulation for Healthcare Professionals: Clinical Pearls and Updates
- RX CPOE Training Video
- Medication Ordering Quick Tips
- USP (795) Non-Sterile Compounding Standard

GMHA CE Program for Nurses:

- Impact of COVID-19 Pandemic on Older Adults. Geriatrics Workforce Enhancement Program, American Geriatrics Society
- Promoting Nurse Self-Care: Emotional and Mental Wellbeing American Nurses Association, RNs can be members; non-RNs can be subscribers.
- COVID-19 May 2020
- Motivational Interviewing
- Effective Pain management is more than just a number

- Meeting the challenge of Pediatric Pain management
- recognizing the signs of the misuse or abuse of controlled substances
- COVID-19: The Impact of a Pandemic on Mental Health, Providing Mental Health Interventions for Patients and Healthcare Workers
- Wound Care

Online Educational Resources for Physicians, Nurses, Social Workers, Physical Therapists, Occupational Therapists, Pharmacists:

- PriMed Coronavirus CME & Resources, Pri-Med
- Covid-19 Clinician Resources, Accreditation Council for Continuing Medical Education
- COVID-19 CME Education, Stanford Medicine
- COVID-19 CME Collection, American College of Emergency Physicians
- Physician Burnout Improve Physician Satisfaction and Patient Outcomes, AMA Ed Hub AMA STEPS Forward
- PHM from Pittsburgh, University of Pittsburgh Medical Center
- PANDEMIC SELF-STUDY PACKAGE: COVID-19, AAFP
- Action Collaborative on Clinician Well-being and Resilience, National Academy of Medicine
- STRATEGIES TO IMPROVE TREATMENT ADHERENCE, Optum Health Education
- COVID-19: Rationing and Drug Regulation, Penn Medicine
- Pediatric Wellbeing in the Time of COVID-19 (Pediatric Grand Rounds), University of Iowa Healthcare, Carver College of Medicine
- COVID-19 Associated Coagulopathy (Internal Medicine Grand Rounds), University of Iowa Healthcare, Carver College of Medicine
- Ventilating COVID-19 Pneumonia: Not Garden-Variety ARDS (Internal Medicine Grand Rounds), University of Iowa Healthcare, Carver College of Medicine
- Guest Pass for UpToDate access now available through May 31, 2020, Wolters Kluwer
- COVID-19 Resources & Tools from Wolters Kluwer
- e-Learning, various courses to choose from, Penn State College of Medicine
- Disaster Epidemiology & Response, CDC
- COVID-19: A Telehealth Opportunity, Medscape
- Engaging Patients in their Reproductive Health Plan (Quality Improvement), Interstate Post Graduate Medical Association
- COVID-19: Learn the Facts, Osmosis
- Infant Ready Emergency Feeding Program, Lactation Education Resources
- TREATING CHRONIC LOW BACK PAIN: A CASE DISCUSSION, Homeroom. California Academy of Family Physicians
- LIVE CME events &/or as LIVE Streaming CME Programs, Harvard Medical School, Brigham and Women's Hospital

- Impact of COVID-19 Pandemic on Older Adults, Geriatrics Workforce Enhancement Program, American Geriatrics Society
- Physician and Trainee Experiences with Patient Bias, JN Learning, AMA Ed Hub
- Racial and Ethnic Health Disparities Research in COVID-19 (Recorded Webinar), Stanford Medicine
- Medicine Grand Rounds: Health Equity in Hispanic and African American Communities with COVID-19 (Recorded Webinar), Stanford Medicine
- Racism in Medicine, part 1, PHM from Pittsburg
- ADVANCING HEALTH EQUITY EDUCATION SERIES, Optum Health Education
- Always a Hot Spot: African American Health in the time of COVID-19 (Internal Medicine Grand Rounds), Carver College of Medicine

(Source: Guam Memorial Hospital Education Center website: <https://www.GMHA.org/education-corner/>)

Facility Improvements and Renovations

In 2013 GMHA completed expansion and upgrade projects to the Emergency CCU, ICU, and Pharmacy departments. A backup chiller repair project was completed in 2014. In 2015 GMHA finalized the Urgent Care Unit renovations. In 2016 the medical telemetry room upgrades, hospital cooling towers replacement, hospital vertical elevators modernization and hospital converged VoIP telephone system phase III projects were accomplished. In 2017 GMHA finished the telemetry and pediatric patient monitoring system upgrade project and the removal and replacement of GMHA's nurse call system project. In 2018 the design-build hospital rooftop solar photovoltaics (PV) system, public address head replacement (end only with redundancy system) project, demolition of the exterior east and west emergency egress walkways, expansion of converged VoIP telephone system was concluded, the removal and replacement of OB Ward, Labor & Delivery and Nursery call/code 72 systems, and the replacement of GMHA exterior east & west emergency egress walkways projects were accomplished. In 2019 the hospital completed New 64-Slice CT Scanner upgrades, Main Lobby and Rehabilitative Services for the HVAC AHU replacements, and energy efficient hospital perimeter and parking lot lighting projects. In 2020 the hospital concluded the Emergency Department negative pressure upgrade designs.

In the long term, the hospital has plans to begin putting together a task force in response to an assessment from the Army Corps of engineers recommending the facility be replaced. Initial discussions will involve pursuing federal grant funding for design and construction.

3.1.9. Facility Conditions

GMHA operates its own pharmacy for providing medications to patients. The pharmacy manages a warehouse and keeps medications on hand. All IV medications are prepared in accordance with the U.S. Food and Drug Administration (FDA). 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 a pharmacist on duty at all times.

Storage Warehouse

GMHA 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.

Emergency Department

The Emergency Department is currently 5,400 14,185.00 square feet with the recent addition of the Emergency Department expansion and Urgent Care center 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

Critical Care Unit

The Critical Care Unit has been expanded to 7990 square feet with the addition of a new ICU/CCU Cares 5, 15-bed unit (including two isolation rooms), with most rooms being approximately 200 square feet in size. The new CCU space supports 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.

The facility accommodates parking for 451 vehicles.

Education Library

The hospital's Education Department used to involve a library and training room area with consumer health resources, books, computers, magazines, and journals for reference that any staff in the hospital can use. The library has been repurposed into office space for Americorps. The training room is located on the 4th floor across from Employee Health and next to the chapel. The 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.

Inpatient beds

Inpatient care is defined as a patient who is hospitalized for 24 hours or more. At GMHA, inpatient care consists of acute care units where patients are admitted. There are nine acute care units at GMHA, 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. Table 2.1 shows the average stay and average occupancy for each major inpatient unit.

Table 4. Major Inpatient Unit Occupancy

Acute Care Unit	Average Stay (days)	Average Occupancy
Surgical (4th floor)	22	67%
Medical Surgical	0	0%
Medical Telemetry	1	5%
Progressive Care Unit	0	0%
Intensive Care Unit / Critical Care Unit	0	0%
Pediatrics	6	27%
Pediatric ICU	0	0%
Obstetrics	8	40%
Medical Surgical Annex (3RD floor)	0	0%

Source: GMHA Medical Records, Average Occupancy Rate Report, February 2022

Outpatient beds

Outpatient care describes a visit to a hospital or associated facility for diagnosis or treatment that takes less than 24 hours. GMHA 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 2022, with a total of 161 acute care beds, GMHA had a ratio of 1.05 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 2021 ratios of Hawaii (1.9 beds per 1,000 population) and the US total (2.4 beds per 1,000). This is of particular concern due to Guam's status as a regional hub for treatment of patients in the region. The most current breakdown of bed capacity by GMHA's acute care unit type is presented in Table 2-2.

Table 5. GMHA Bed Capacity by Acute Care Unit

Acute Care Unit	Bed Capacity
Surgical (4th floor)	33
Medical Surgical (3rd floor)	28
Telemetry I (3rd floor)	20
Progressive Care Unit (3rd floor)	6
Intensive Care Unit / Critical Care Unit (2nd floor)	14
Pediatrics (4th floor)	22
Pediatric ICU (4th floor)	3
Obstetrics (2nd floor)	20
Medical Surgical Annex (3RD floor)	15
TOTAL BEDS	161

Source: GMHA Administrative Manual, Policy # A-500, December 2018

GMHA 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 6. GMHA Non-Acute Care Bed Capacity

Unit / Department	Bed Capacity
Inpatient Hemodialysis	9
Emergency Medical Department	27
Urgent Care Unit	5
Operating Room	10
Labor and Delivery	14
Nursery	32
TOTAL BEDS	97

Source: GMHA Administrative Manual, Policy A-500, December 2018

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, GMHA 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 GMHA 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 GMHA 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 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 has two state-of-the-art Giraffe OmniBeds. Both these beds are in great functioning condition. 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 Facility (SNF) in Barrigada Heights in 1996, with their first resident occupancy in December 1999. The SNF specializes in rehabilitation, long-term care, comfort care, wound care, and training for families prior to a resident's return 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 a certified provider by the Centers for Medicare/Medicaid Services (CMS). The general population of residents are in the older age range: approximately 10 percent of residents are under 40 years of age, around 40 to 50 percent are between the ages of 40 and 65, and the remaining residents are older than 65. Eighty-five percent of the residents at the SNF have a turnaround rate of two to four weeks; however, some require a longer stay at the facility.

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 SNF is certified for 42 beds) at the site that can be used for long-term care of patients transferred from GMHA. However, due to limited staffing levels, the maximum number of beds that can be in use at any given time is currently limited to 18 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 SNF 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 are double-occupancy. There are two hospice rooms that are single-occupancy. Four negative pressure isolation rooms were installed at the facility in 2011.

3.1.10. Issues and Challenges

Guam Memorial Hospital

The storage problem has grown worse over time. 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.

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 healthcare facilities GMHA, do not currently have all of the necessary equipment or services to support the full array of needs. 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 GMHA 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 medical 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 GMHA increase access to care; however, the cost and distance of this particular example still poses constraints.

Although GMHA does have certain pieces of medical equipment needed to provide various levels of care, many items are in need of repair or replacement.

The location of GMHA makes it difficult to access by certain communities. Although GMHA's location on the northern central side of Guam is in the most densely populated area of the island, access to the hospital by residents who live in the more remote areas, particularly in the southern region, 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 GMHA 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 GMHA.

The Emergency Room (ER) at GMHA is often used as the first source of treatment for non-emergency situations. GMHA'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. There are only XX private clinics that could handle non-emergency situations on island. 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 GMHA for the fiscal years (FY) 2010 to 2020 identified that there is an average of 21,854 people that visit the ER each fiscal year. 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 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

The hospital reports 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.

GMHA has a significant deficit in the number of acute care hospital beds in relation to the number of people that the hospital serves. The current 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 consider persons who are sent to the hospital from off-island. Guam's population 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 2020 population estimates for Guam, a total of 306 (141 additional) acute care beds would be needed to reach a ratio of 2.0 beds for every 1,000 persons, and 367 (206 additional) beds would be needed to reach the US average.

Intensive Care Unit

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 15 beds in ICU, and sometimes patients are sent to other departments when there is overflow.
- 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

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

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

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 Giraffe OmniBed is missing parts, making it unusable.

Obstetrics Ward

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

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 wheelchair. Patients in wheelchairs 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

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 GMHA. 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.
- Some vendors have cut off medication and supply deliveries due to lack of payment from GMHA.

Radiology

Radiology staff identified several problems with the space and equipment in their department:

- The MRI equipment has not been functional since 2010. GMHA 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. The Nuclear Machine has not been functional for years and the reasons are correct. The hospital has surveyed out the old nonfunctioning Nuclear Med machine and converted the room to Anfi-suite.
- Currently, GMHA has to send patient referrals to private providers for MRI and nuclear medicine services.
- Mammogram capabilities were discontinued in November 2021 because the film processor was too old to be adequately used anymore and no replacement has been acquired.
- The hospital has two CT Scan machines that were installed in 2019; both 64 slices.
- There are two x-ray machines. The normal life expectancy of these machines is eight years. New state of the art equipment is needed. They are still functional and if budget permits, the hospital can buy replacements.
- The ultrasound machine was acquired around the year 2005 and has experienced a lot of wear and tear. The GE Logiq E9 was installed in June 2017.

Recovery Ward

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

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 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.

Telemetry Unit

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

GMHA also has a warehouse for the storage of bulk items and supplies. Staff in the Warehouse identified several problems with the space and equipment in the warehouse facility:

- The Materials Mgmt. warehouse carries an inventory of 1,065-line items stocking an assortment of medical supplies (needles, syringes, gloves, mask, isolation gowns, surgical gowns, sharps containers, wipes, adult briefs, etc. Many of the supplies are bulky (large boxes), baby formulas, adult formulas, dietary supplies, radiology supplies, OR supplies, etc., office supplies, IV Solutions, and many more.
- Materials received from Guam Homeland Security such as gloves, isolations gowns, and isolation masks which are regular stock supplies, but were unable to store. The warehouse also receives assorted donated supplies from Public Health via the World Health Organization (WHO) as well as many various companies throughout the island.
- The warehouse does have temperature control supplies which are placed in the warehouse. Non-temperature supplies are kept outside. As for our supplies stored in the warehouse expansion, they are brought upstairs using the elevator located outside of Materials, however, we have no other way of bringing these supplies upstairs if the elevator goes down.

Skilled Nursing Unit Facility

An entire wing of the SNU is currently not able to be utilized for 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 GMHA 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 3 people.

There are no programs on Guam for patients with psychiatric and medical problems. 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 GBHWC 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.

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 GMHA 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 GMHA 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.

3.1.11. Outlook

GMHA management looks forward to the following in FY 2022:

Updating and Developing the Strategic Plan

GMHA will develop a scope of work to update the 2018 – 2022 strategic plan. The current strategic plan encompasses five goals that need to be reevaluated for relevancy and to reflect the expected environment considering the hospital’s operations during COVID. COVID-19 will also continue to challenge GMHA’s finances, particularly with declines in patient census and the reliance on Government of Guam subsidies funded by Business Privilege Taxes and the General Fund. As GMHA recovers from disrupted revenue streams, GMHA will seek federal assistance afforded to healthcare providers to recover lost revenues as well as improve revenue cycle processes.

Working Towards the New Hospital Facility

GMHA will continue collaborating and engaging with the Guam Healthcare Task Force to complete the conceptual design for the new hospital facility and medical campus as recommended in November 2019 by the Army Corps of Engineers (ACOE). Although new construction will be pursued, the ACOE

recommended that GMHA immediately begin work to repair the Hospital's critical life safety items after an extensive onsite facilities condition assessment. The Guam Healthcare Task Force is exploring land acquisition for the new medical campus.

Improving Cash Flow and Revenue Cycle Management Evaluation

In June 2021, consultants from MedHealth Solutions began reviewing GMHA's current revenue cycle management processes, which includes charge description master, patient registration, coding, medical records, billing, billing follow-up, denial management, and collections. Their goal is to help optimize GMHA billing systems and increase GMHA's overall collections. Major components of the project involve implementation of a bill scrubber and clearinghouse; establishing a revenue integrity department to ensure proper charges, revenue capture, and denial prevention; and proper organizational structure for the Fiscal Division. The term of the contract is one year with completion in May 2022 when GMHA staff will manage the revenue cycle after proper training and updated policies and procedures.

Completing the TakeCare Insurance Company Reconciliation of Disputed Claim

From March to September 2020, GMHA patients subscribed as TakeCare Insurance Company (TakeCare) members were considered self-pay. In September 2020, GMHA resumed accepting insurance coverage under TakeCare after GMHA and TakeCare signed a memorandum of agreement for a third-party firm to perform an agreed-upon procedures engagement to reconcile disputed claims from January 1, 2012 to April 30, 2017. A Provide Service Agreement was finalized in January 2021. The agreed-upon procedures report was completed in October 2021 and final settlement of the amounts is expected in April 2022.

Carrying Out Recruitment and Retention Initiatives

GMHA continues to experience challenges with recruitment and retention of nursing professionals and other clinical professional staff. Following the implementation of the Nurse Professional Pay Structure and Differential June 2021, GMHA will continue to address other pay disparities in other clinical areas until the Department of Administration concludes a comprehensive competitive wage study for all GMHA staff. These clinical areas include radiology, special services, rehabilitation, dietary, pharmacy, and social services.

Ongoing Capital Improvements

The Hospital's roof and envelope are being upgraded to enhance the facility's structural integrity during heavy rainfall and mitigate against potential leaks. This project is currently in the design phase, with the first portion tracking to begin in November 2021. The roof upgrade is a phased project that is expected to take up to one year. The first phase will begin with the area over the hospital's laboratory.

In addition, GMHA is finalizing plans to demolish the vacant Z-Wing portion of the facility. One-third of the wing will be salvaged to preserve telecom lines and use as additional office space; the remaining structure will be demolished and converted into parking spaces. The project has completed the abatement phase and is currently in pre-demolition. The demolition process is expected to begin 3rd quarter of FY 2022.

The Alternate Care Facility (ACF) plans for the Skilled Nursing Facility (SNF) in Barrigada Heights will include the isolation of the B-Wing, to ensure the safety of SNF residents, should there be a need to treat COVID-19 patients at the ACF. ACF upgrades include the manufacturing, installation and commissioning of two 134-ton chillers, as well as upgrades for beds and IT infrastructure that supports the building and other ancillary support equipment.

Additional GMHA capital improvements include HVAC upgrades to remove and replace 22 more Air Handling Units (AHUs), to include upgrades to the ICU and Emergency Room HVAC systems in the coming months. A new Angio Suite will be procured in FY 2022 funded by Compact Impact funds.

4. Private Providers

According to the Guam Board of Medical Examiners, 517 medical providers are licensed in Guam, with 39 facing expiration of their license in 2022.

4.1. Facility Changes Since 2012

Medical facilities that have closed since 2012 are:

- A branch of 20/20 Vision Center (opened and closed between 2012 and 2022)
- American Dialysis Center (opened and closed between 2012 and 2022)
- Dr. Kim's Cardiology Clinic
- Dr. Olivia Cruz Internal Medicine
- Evergreen Health Clinic (opened and closed between 2012 and 2022)
- Guam Orthopedic Clinic (opened and closed between 2012 and 2022)
- Guam Poly Clinic
- Guam Vein Institute (opened and closed between 2012-2022)
- Hagåtña Clinic (opened and closed between 2012 and 2022)
- Harmon Doctor's Clinic
- Isla Pediatrics
- Island Foot Specialists (opened and closed between 2012 and 2022)
- ITC Clinic (opened and closed between 2012 and 2022)
- Latte Stone Cancer Clinic
- Marianas FootCare Clinic
- Pacific Retina Group (opened and closed between 2012 and 2022)
- Pacific Urology Consultants
- PMC Isla Health Systems
- St. Anthony's Clinic
- Tumon Medical Office
- Weingarten Institute for Neuroscience - not currently in operation, but proposing to combine with Guam Memorial Hospital

New providers since 2012:

- Newgen Physical Therapy
- Good Samaritan Hospital
- Larkin Family Chiropractic
- Hafa Adai Specialist Group
- Diagnostic Laboratory Services Inc.
- ITC Pharmacy
- Pacific Pulmonology Consultants
- Guam Medical Health Care Center/Eden E. Villa, M.D. Internal Medicine
- St. Lucy's Eye Center
- Guam Urology
- Express Care
- Marianas Physicians Group (MPG) Pediatrics (merger and expansion of Sagua Managu, which was surveyed in 2012)
- Ideal Vision Center
- United Family Medical Center
- IHP Medical Group
- Ideal Optical
- Health Services of the Pacific
- Gentle Care Dental
- The Pediatric & Adolescents Clinic
- Dr. Horinouchi Wellness Clinic & Massage Therapy
- Guam Dermatology Institute
- Guam ENT Clinic
- Dr. Gabel's Clinic
- Family Dental Center
- Garcia Optical
- Guam Dental Arts
- Guam Foot Clinic
- Guam Hearing Doctors
- Guam Visiting Nurses
- Island Eye and Retina Specialists

- Pacific Retina Specialists
- One Love Pediatrics
- Pacific Life Chiropractic
- Samonte Medical Clinic
- Trinity Health Care/Omnihealth
- Marianas Chiropractic Clinic
- Lombard Health at “The Village”
- Guam Traveler’s Clinic
- Central Medical Clinic
- Guam Regional Medical City
- Hagatna MED Clinic
- Agahan Optical
- Women's Clinic
- Pregnancy Control Clinic
- Kallingal's Medical Clinic
- Custom Fitness, LLC
- Center for Women’s Health
- Paraoceana Health Services
- US Renal Care Tamuning
- Blue Ocean Medical Group
- Sports orthopedics and Access Rehabilitation Inc. (S.O.A.R Physical Therapy)

5. Survey Results

The survey questions were expanded in the 2022 edition to allow deeper insight into the functioning of private medical providers. Questions that are repeated from the 2012 survey are noted. Not all participants answered all the questions. If only a portion of survey respondents answered a question, the total number of responses is noted in the description.

Questions 1: Name of practice/organization; 2: Survey completed by; 3: facility contact information; and 4: website

As in 2012, identifying information was collected to help the team identify points of contact for follow-up to incomplete or unclear information. No individual provider is represented in the following discussion; all data is in aggregate form. In this update, a question was added to collect the facility website information as an additional identifier and a modern equivalent to the physical address.

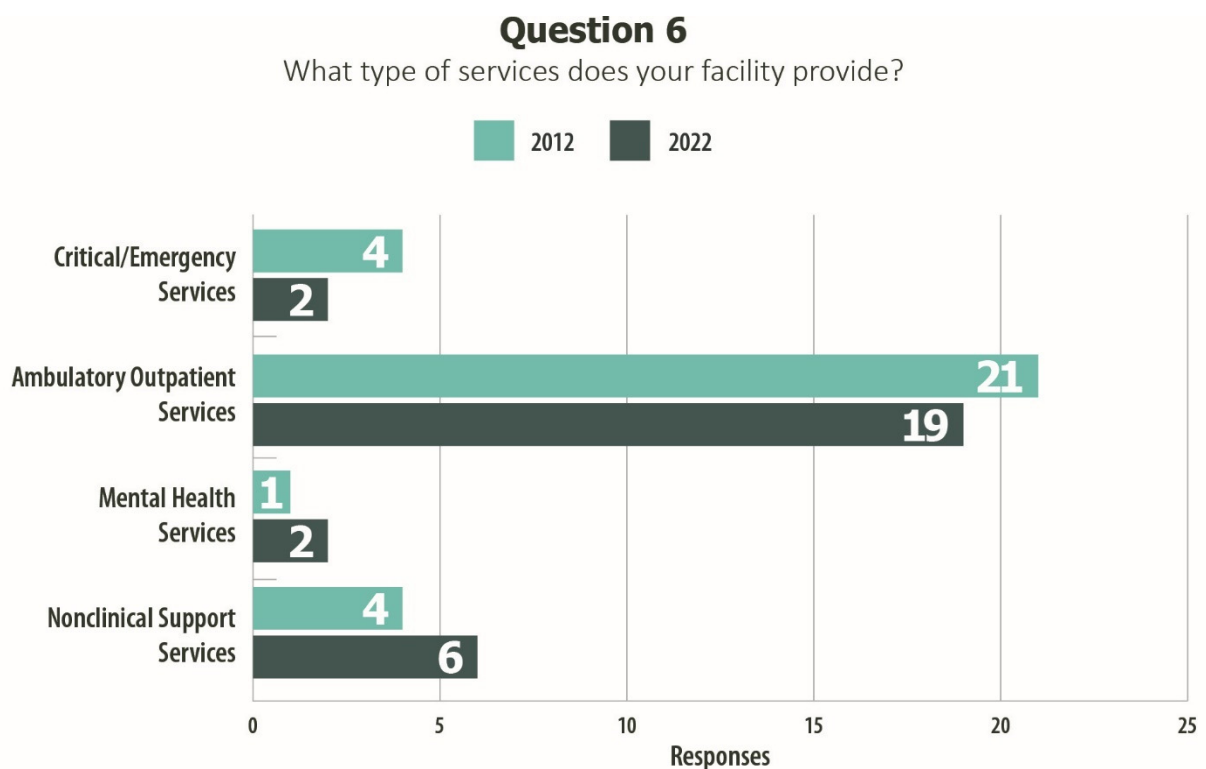
In 2012 there were 45 participants. In 2022 there were 27 participants.

Question 5: Number of Years in Existence:

All participants answered this question. The lowest number of years in existence was 2 years. The longest number of years in existence was 40 years. Most clinics were between 6-12 years old or 20-25 years old. No participants identified being brand new (under a year) or over 40 years old.

Question 6: What type of services does your facility provide?

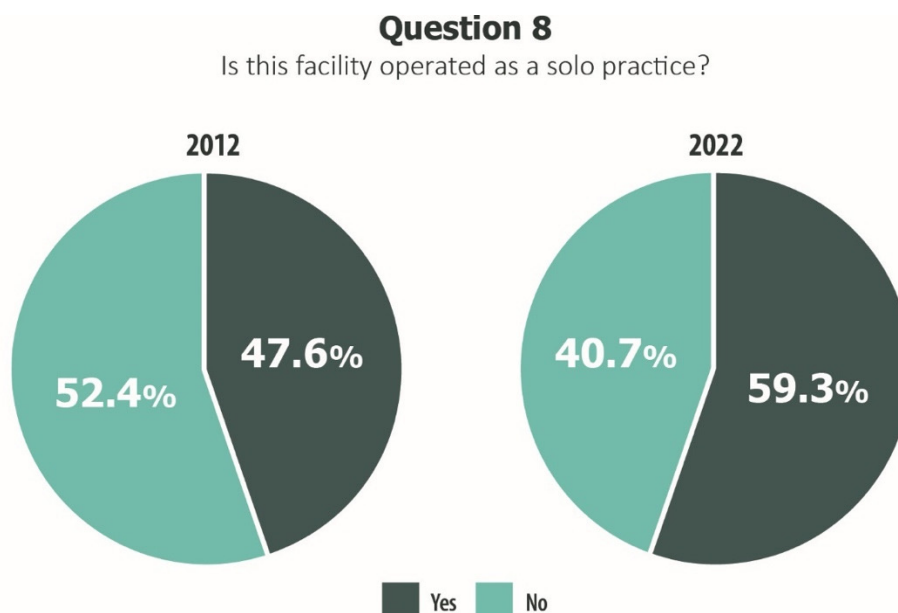
In 2012 participants provided details about services provided at their practice. In 2022, Matrix condensed the list of options into four major categories: critical/emergency services, ambulatory outpatient services, mental health services, and nonclinical support services. Most of the respondents stated that they provided ambulatory outpatient services.

**Question 7: Who owns the practice?**

This question was not clearly articulated in the 2012 survey, so in 2022 it was outlined more specifically. Most respondents (87%) indicated ownership by a private physician or physician group. Four other respondents clarified that they were owned by a medical holding group or limited liability corporation.

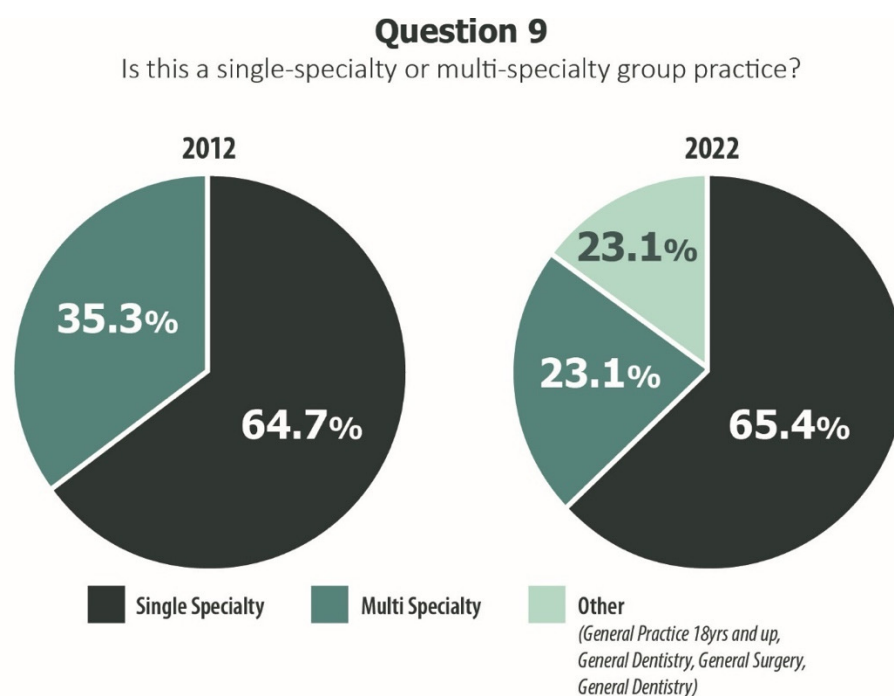
Question 8: Is this facility operated as a solo practice?

In 2012, 47.6% of the respondents reported being a solo practice. In 2022, that number grew to 61.5%.



Question 9: Is this a single-specialty or multi-specialty group practice?

In 2012, 64.7% of the respondents chose single specialty. In 2022, 65.4% chose single-specialty, 23.1% chose multi-specialty, and the four participants (12%) who chose the new option, 'other', specified: general practice, general surgery, or general dentistry (two respondents).



Question 10: What areas of specialty does your facility focus on?

Several specialist types from the 2012 survey were also represented in the 2022 update including:

- Internal medicine
- Family medicine
- Nephrology
- OB-gynecology
- Behavioral counseling
- Dentistry
- Ophthalmology
- Optometry
- Endocrinology
- Orthopedics

In addition to these overlapping specialties, the other 2022 respondents specialized in dermatology, chiropractic, oral and maxillofacial surgery, child psychiatry, sports medicine, infectious disease, general surgery (2), wound care, physical therapy (2), home health, geriatrics, and radiation oncology.

Some key specialty areas that were missing representation in the survey due to lack of provider participation or provider presence on Guam included:

- Pediatrics
- Radiology
- Oncology
- Cardiology
- Neurology
- Pulmonology
- Pharmacy
- Laboratory

Question 11: Additionally, please provide an estimated percentage of patients for each service in the week prior to the date of this survey: please note, a single patient may have more than one service per visit.

Although other questions about patient traffic were asked in the 2012 survey, this question was added to the 2022 survey to provide deeper insights into the use of specific services. Some of the most reported services provided by any single provider were family medicine (476 patients in the past week), nephrology (100), dentistry (166) ophthalmology (300), and 125 at a chiropractic office. The patient traffic table below can also be used to identify what percent of weekly patients came for specific services.

Question 11

Estimated number of patients by service type for any given week.

NOTE: a single patient may have more use more than one service per visit.

Facility Name	Internal Medicine	Pediatrics	Radiology	Family Medicine	Oncology	Nephrology	OB-Gynecology	Behavioral Counseling	Dental	Ophthalmologists	Optometry	Neurology	Endocrinology	Pharmacy	Orthopedics	Other	Total Patients
ISland Cancer Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35 (100%)	35
The Doctors' Clinic	115 (100%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115
Pacific Surgical Arts	-	10 (12%)	20 (25%)	-	5 (6%)	-	-	2 (2%)	40 (49%)	-	-	2 (2%)	-	2 (2%)	-	-	81
Garcia Optical	-	-	-	-	-	-	-	-	-	-	30 (100%)	-	-	-	-	-	30
Health Services of the Pacific	-	-	-	275 (100%)	-	-	-	-	-	-	-	-	-	-	-	-	275
Pacific Medical Group	-	-	-	-	-	100 (100%)	-	-	-	-	-	-	-	-	-	-	100
Private Office	-	20 (40%)	-	-	-	-	-	30 (60%)	-	-	-	-	-	-	-	-	50
Center for Women's Health	-	-	-	-	-	-	61 (100%)	-	-	-	-	-	-	-	-	-	61
Doctor Gregory J Miller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125 (100%)	125
Garcia Optical 2nd location	-	-	-	-	-	-	-	-	-	-	60 (100%)	-	-	-	-	-	60
Guam Dental Arts	-	-	-	-	-	-	-	-	166 (100%)	-	-	-	-	-	-	-	166
St. Lucy's Eye Clinic	-	-	-	-	-	-	-	-	-	80 (100%)	-	-	-	-	-	-	80
Health Partner's LLC	-	-	-	-	-	-	-	-	-	-	-	-	72 (100%)	-	-	-	72
Omnihealth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63 (100%)	63
Custom Fitness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80 (100%)	80
Adult Health Care Clinic	112 (92%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 (8%)	122
Hafa Adai Specialist Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 (13%)	70 (88%)	80
Lombard Health	-	-	-	-	-	-	-	-	-	250 (76%)	80 (24%)	-	-	-	-	-	330
Island Eye Center	-	-	-	-	-	-	-	-	-	300 (100%)	-	-	-	-	-	-	300
Health Services of the Pacific (2nd location)	20 (11%)	-	-	80 (44%)	-	-	-	-	-	-	-	-	-	-	-	80 (44%)	180
IHP Medical Group	51 (10%)	-	-	476 (90%)	-	-	-	-	-	-	-	-	-	-	-	-	527

EQUIPMENT

Questions 12-28: Types of Equipment

In 2012, survey participants were asked to note what sort of equipment they had. In the 2022 survey, respondents were also asked about the utilization rate of these machines and whether more were needed. The equipment results for those who participated in the survey are below:

- Five EKG machines: low utilization rate, but need for at least one more on island
- Two chemotherapy/radiation therapy: high utilization rate
- One CT scan: low utilization rate
- No dialysis machines
- No lab testing
- No mammography machines
- No MRI machines
- No PCR machines
- No PET scans
- No polysomnography
- No spirometry
- Three ultrasound machines: low utilization
- 79 vital machines: medium to high utilization
- 25 x-ray machines: low utilization (due to working poorly) with need for at least one more

The respondents listed other high-value equipment included retina photography machine, ocular coherence tomography, endoscopy scopes, and processor.

Question 29: Is the diagnostic equipment identified at your facility adequate to meet your patients' needs? and Question 30: please identify the equipment and quantity your facility is lacking.

19 respondents indicated their equipment was adequate by selecting “yes”; the remaining 13 skipped the question.

When identifying equipment their facility was lacking, only two noted a lack. One indicated a need for an additional EKG/ECG machine, and one indicated a need for an additional x-ray machine.

Question 34: Does your facility have adequate PPE and antiseptic supplies? (e.g., gloves, gowns, masks, antibacterial wipes) and; Question 35: if not, please identify what supplies your facility is lacking.

These questions were not part of the 2012 update but were added in light of the COVID-19 pandemic response. 92% of respondents said they had adequate PPE, and only two participants stated they did not. Island Eye Care elaborated, stating that its facility was lacking in “all” supplies, and Adult Health Clinic reported a shortage of gowns and masks.

STAFFING

Question 36: Medical Professionals (MD, DO, DDS, etc.) and; Question 37: Medical Professionals (RN, etc.) and ; Question 38: Mid-level providers (nurse practitioners, physician assistants, etc.) and; Question 39: Medical Support (CNA, MA, LVN, etc.) and; Question 40: Allied Health Professional (RT, dental hygienist, lab technician, social services worker, etc.) and; Question 41: Administrative/Support and; Question 42: Other staff

These questions are important to gauge the ability of the various providers to serve their patients efficiently.

Most responding facilities had just one full-time medical professional. All facilities, including those with more than one location or serving more than 100 patients a day, operated with 5 or fewer full-time medical professionals (MD, DO, DDS) on-site, with many reporting a need to double their professional medical staff to adequately cover staff responsibilities.

Facilities may have a few registered nurses. However, the respondents indicated that most support staff come from full-time medical support staff such as Certified Nurse Assistant, MA, LVN and others. A few facilities indicated that they aim to expand their staffing.

There seemed to be an adequate supply of allied health professionals (Respiratory Therapist, dental hygienist, lab technician, social services workers) and administrative support staff.

Following is a table of all staff types.

Question 36-42

Number of Staff by Type of Staff

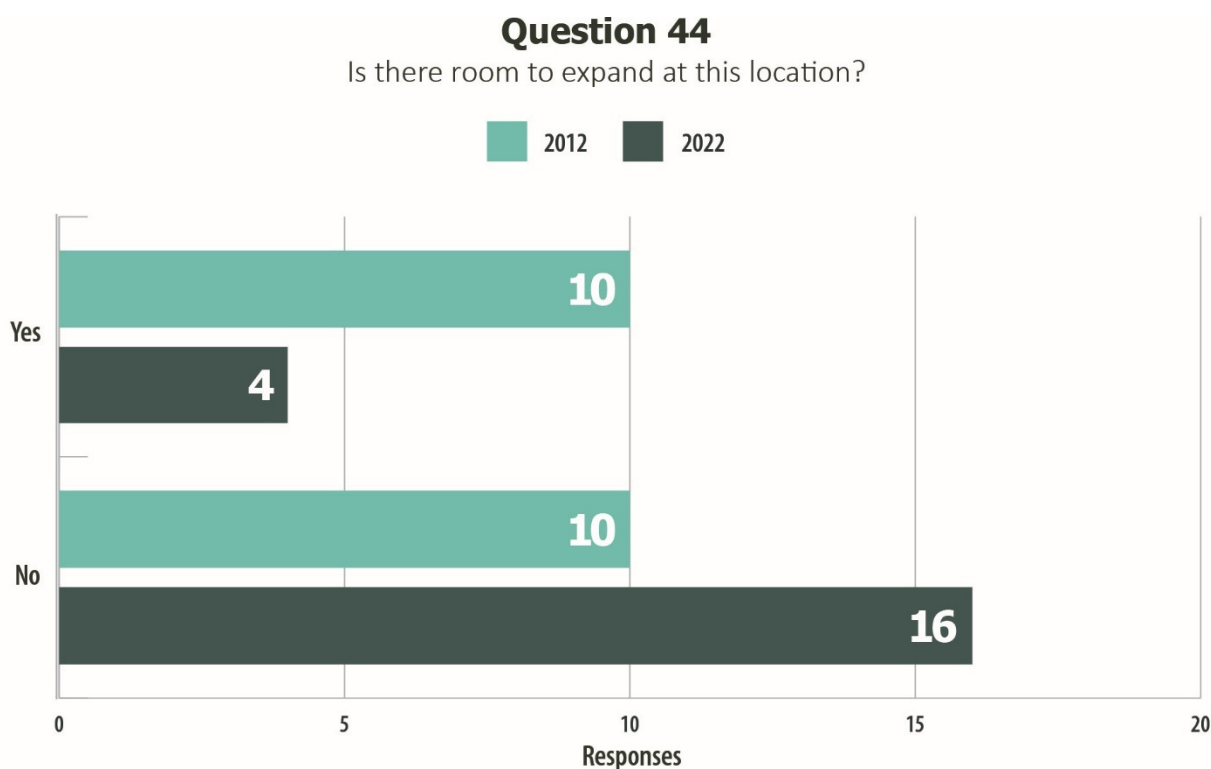
Staff Type	1 Staff	2-3 Staff	4-5 Staff	6-10 Staff	10+ Staff
Medical Professionals (MD, DO, DDS, etc.)					
Full Time	18	4	3	-	-
Part Time	5	1	-	-	-
Volunteer	-	-	-	-	-
Additional Staff Needed	3	2	1	-	-
Medical Professionals (RN, etc.)					
Full Time	2	-	1	-	-
Part Time	-	-	-	-	-
Volunteer	-	-	-	-	-
Additional Staff Needed	-	-	-	-	-
Mid-level Providers (Nurse Practitioners, Physician Assistants, etc.)					
Full Time	3	1	-	-	-
Part Time	2	1	-	-	-
Volunteer	1	-	-	-	-
Additional Staff Needed	2	2	-	-	-
Medical Support (CNA, MA, LVN, etc.)					
Full Time	1-	7	2	-	1
Part Time	2	1	-	-	-
Volunteer	1	-	-	-	-
Additional Staff Needed	2	2	-	-	-
Allied Health Professional (RT, Dental Hygienist, Lab Technician, Social Services Worker, etc.)					
Full Time	8	4	-	3	-
Part Time	5	1	2	-	-
Volunteer	-	-	-	-	-
Additional Staff Needed	-	-	-	-	-
Administrative/Support					
Full Time	16	6	4	2	1
Part Time	6	3	1	-	-
Volunteer	-	-	-	-	-
Additional Staff Needed	-	-	-	-	-
Other					
One Establishment has 3 Medical Billers					
One Establishment has a Physical Therapy Assistant					
One Establishment States They Operate with 5 Other Staff					
One Establishment States They Operate with 4 Other Staff					

Question 43: What is the overall square footage of this facility?

Only 18 of the 32 survey participants answered this question. The size of the facilities ranged from 900 to 120,000 square feet. Most facilities covered between 1,000 and 5,000 square feet, with an average of 3,000 square feet in private provider practices.

Question 44: Is there room to expand at this location?

In 2012, half of the respondents said there was no room to expand, while half said there was room. In 2022 the majority said there was no room to expand, while four participants said there was room to expand.



Question 45: How many locations does your organization operate from and; Question 46: If your organization operates from multiple locations, how do these locations differ?

This question was not asked in the 2012 survey but was aimed at understanding how these private medical providers were growing. Twenty-three respondents answered this question, and only one mentioned having more than one location. This participant stated that the locations had “similar capabilities and staffing.”

Question 47: Does your organization maintain any memorandums of understanding or agreements with other organizations? and; Question 48: If yes, can you provide a copy?

This question was new to the 2022 survey. 72% of respondents said they did not have any memoranda of understanding. Of those who did, none were willing to provide a copy.

Question 49: Hours of operation

The respondents from the survey this year reported generally shorter hours compared to the participants in 2012.

Question 49

Responses to Hours of Operation

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Open Time	5:00 AM	1	1	1	1	1	-	-
	7:00 AM	2	2	1	1	2	1	-
	8:00 AM	13	12	12	13	13	4	-
	9:00 AM	3	3	3	3	3	2	-
	10:00 AM	2	2	2	2	2	2	-
	3:00 PM	-	-	1	-	-	-	-
	CLOSED	-	-	1	-	-	4	8

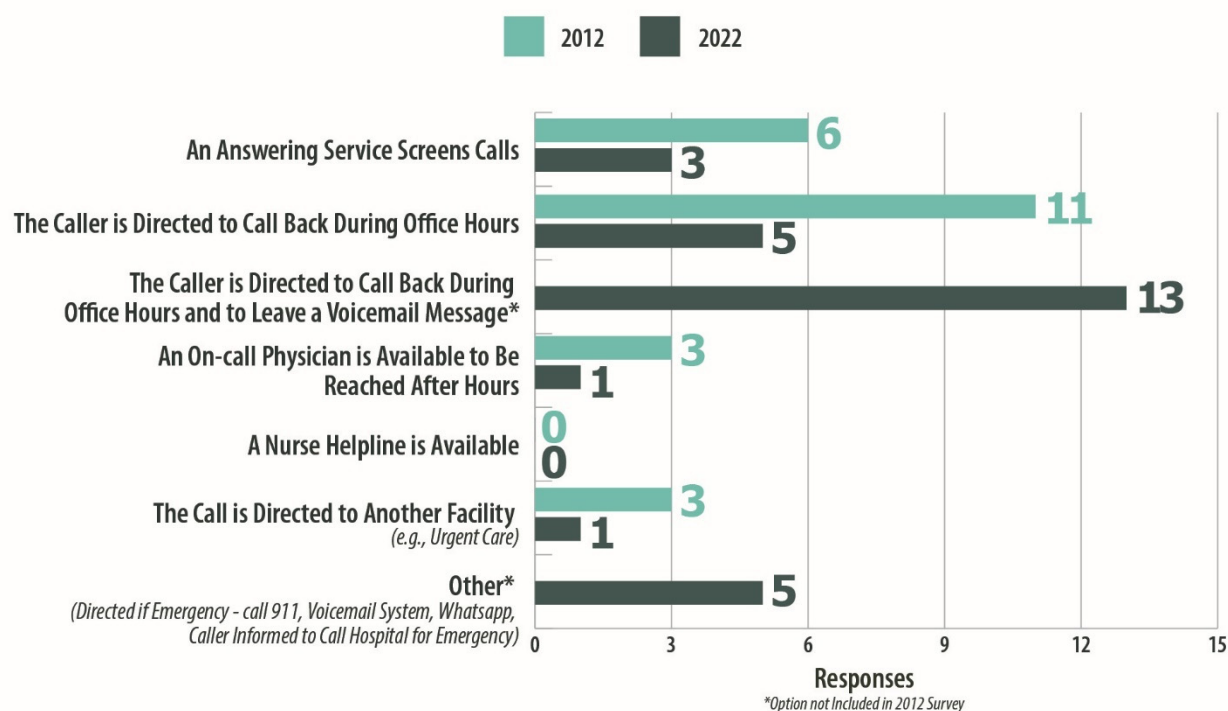
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Close Time	12:00 PM	3	1	2	1	3	2	-
	1:00 PM	1	1	1	1	2	1	-
	2:00 PM	-	-	-	-	2	-	-
	3:00 PM	2	-	4	1	-	-	-
	4:00 PM	4	6	3	6	3	-	-
	5:00 PM	10	11	9	10	10	4	-
	6:00 PM	1	2	1	2	-	-	-
	CLOSED	-	-	1	-	-	4	8

Question 50: When your facility is closed, which of the following applies for non-emergency after-hour calls?

The answers to this question remained similar to the results of the 2012 survey.

Question 50

When your facility is closed, which of the following applies for non-emergency after-hour calls?



Question 51: How many patients do you serve annually?

This question was specifically outlined in the 2022 survey to get a better idea of overall patient load. 19 participants answered this question. The answers ranged from 243 to 120,000. Most participants reported between 1,500 and 5,000 annual patients. The average annual patient load was about 2,500.

Question 52: How many patients did you encounter at this location during the previous week (the week before you completed this survey)?

The providers answered with a wide range of responses reflecting the size of their clinic. Overall, the most typical weekly patient load was around 100 patients per week, with smaller patient loads at 30 patients per week, and larger practices drawing up to 250 patients per week.

Question 53: Are you currently accepting new patients?

Almost all of the facilities that participated in the survey are currently accepting new patients. Only one participant, a mental health provider, said that they are not accepting new patients.

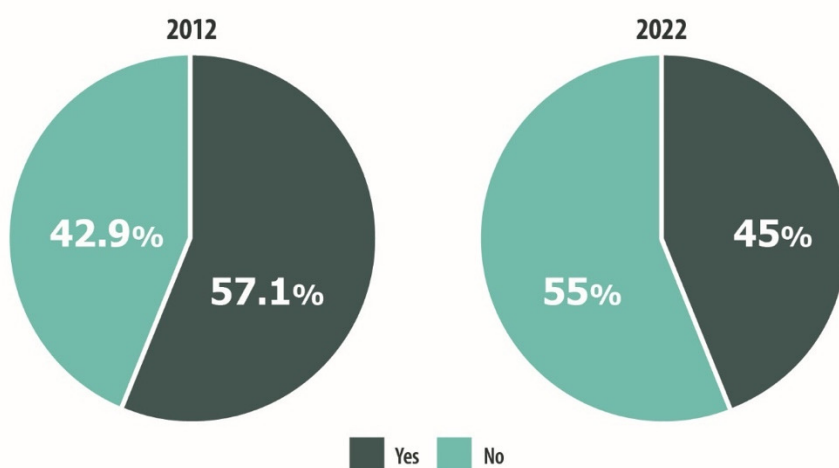
Questions 54 and 55: Does your practice set time aside for same-day appointments?; and, Question 55: If Yes, what roughly what percent of your daily visits are same day appointments?

In 2012, 57% of respondents said their practice set time aside for same-day appointments. In 2022, however, only 40% of participants answered yes to this question.

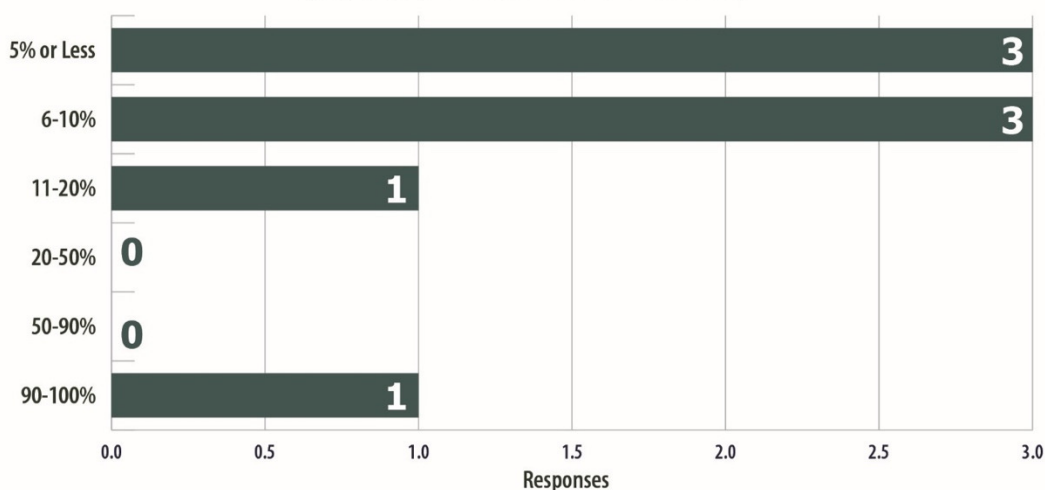
Except for one participant, an optometrist, who answered that 100% of daily visits were same-day appointments, most of these providers offer same-day appointments to less than 15% of their daily patient load. This percent is lower than in the 2012 survey, where some respondents allotted 30%, 50%, or even 80% of their visits to same-day appointments.

Question 54 & 55

Does your practice set time aside for same-day appointments?



If yes, what percent of visits are same day?



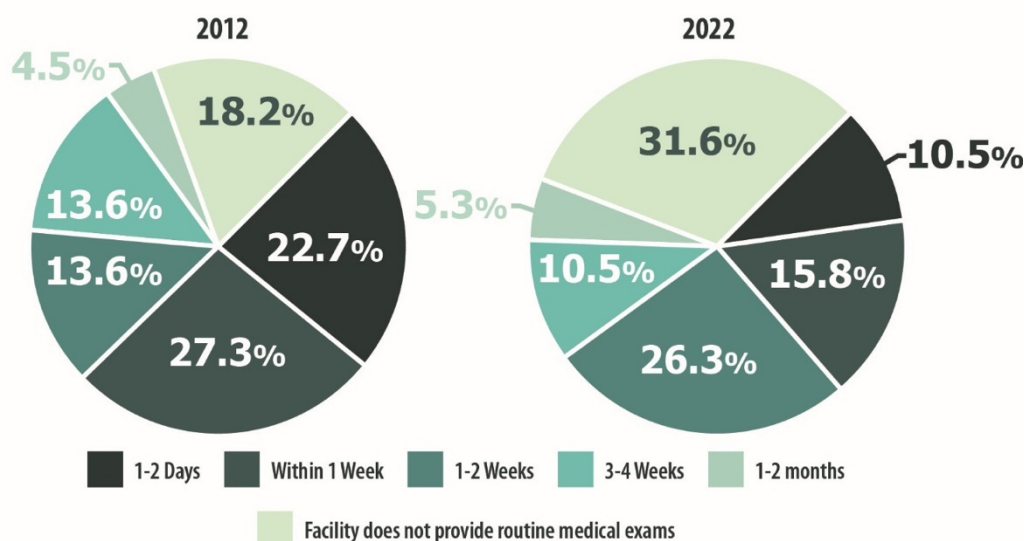
Other: One participant did list a percentage, but stated walk-ins accepted depending on MD schedule.

Question 56: On average, how long does it take to get a routine medical exam appointment?

In 2012, about half the respondents reported being able to schedule appointments in under a week. In 2022, scheduling took longer, with 26% of medical providers having the ability to see patients within one week of scheduling and 26% having the ability to see patients within 1-2 weeks.

Question 56

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

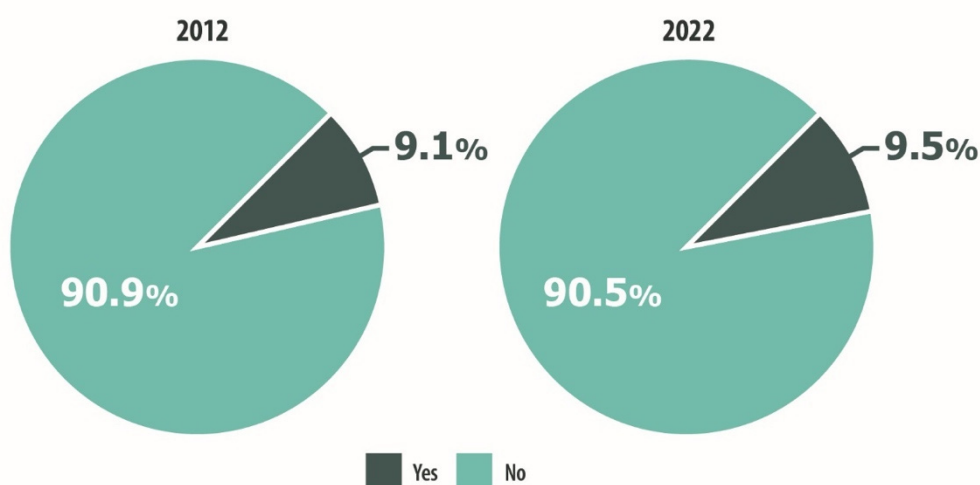


Question 57: Do practitioners from this facility directly provide any in-home care services?

This question did not change from 2012. 90.5% of respondents in this 2022 survey said they did not offer any in-home care services and two respondents (9.5%) said they did.

Question 57

Do practitioners from this facility directly provide any in-home care services?

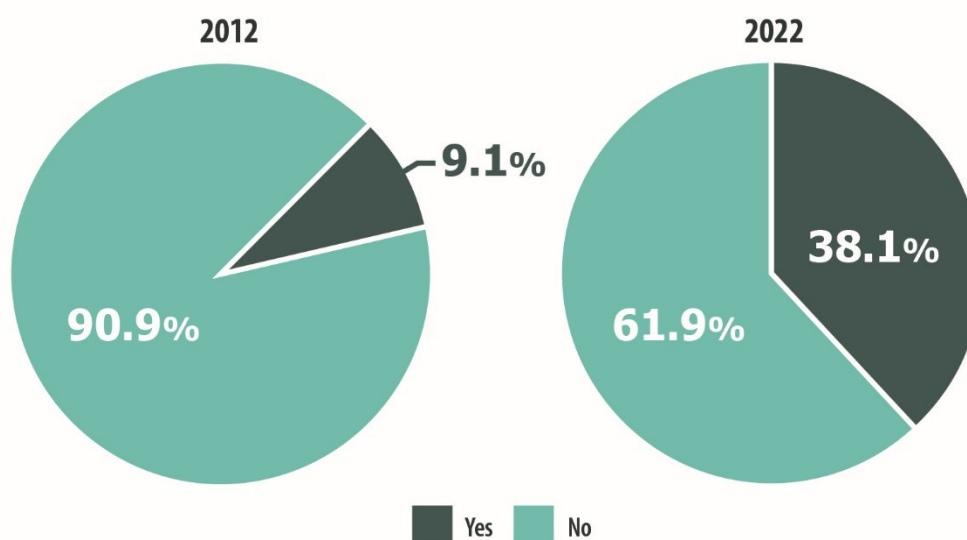


Question 58: Do practitioners from this facility provide any virtual or tele-health consultations?

In 2012, this question was worded slightly differently, asking providers whether they provide internet or email consultations. With advancements in technology, the language was updated to “tele-health” consultations. There has been some increase over the last decade. In 2012, only 9.1% of survey participants offered virtual consultation services. In 2022, 34% of survey participants offered virtual consultations services.

Question 58

Do practitioners from this facility directly provide any in-home care services?



FACILITIES

Question 59: Exam/Treatment Rooms, and; Question 60: Physician offices, and; Question 61: Patient waiting area, and; Question 62: Recovery/In-patient beds (number of beds), and; Question 63: X-ray, and; Question 64: Medical supply storage (square feet), and; Question 65: Pharmacy, and; Question 66, 67, 68: Other key working areas/patient areas

Questions about facility space were in the 2012 survey, but in this 2022 survey, participants were given the option of adding “other” to the list of key spaces they operate from.

Spaces were reported as adequate to meet patients’ needs, except the following:

- Two respondents stated that their patient waiting areas were too small. One of these clarified that its waiting area had been rendered inadequate by COVID-19 social distancing requirements.
- One out of the three participants with an x-ray area stated that its x-ray room was inadequate.

A table of the spaces reported by providers can be found below:

Question 59-68

Number of Key Work/Patient Areas at Facilities

Type of Facility	Exam/Treatment Rooms	Physician Offices	Patient Waiting Area	Recovery/In-Patient Beds (in number of beds)	Storage (in sf)	Pharmacy	Other Rooms
Radiation Oncology	2	1	10	-	20	-	1 Resource Center
Family and Internal Medicine	5	2	8	-	-	-	1 Immunization Room
Oral and Maxillofacial Surgery	4	2	8	4	2	1	
Optometry	1	1	3	-	-	-	
Family Medicine	6	1	12	-	1	-	
Nephrology	3	6	12	-	12	-	
Child Psychiatry	1	1	4	-	200	-	2 Triage Rooms
Physical Therapy and Home Health	4	-	8	-	-	-	
OB-Gynecology	5	1	8	-	60	-	
Chiropractic	4	1	10	-	50	-	
Optometry	2	2	2	-	-	-	
Dental	8	1	-	-	-	-	
Ophthalmologists	5	-	25	-	-	-	
Endocrinology	3	3	15	-	-	-	
Wound Care	3	1	10	-	-	-	
Physical Therapy	5	-	10	-	-	-	
Infectious Disease	6	1	15	-	-	-	
Dental	8	1	16	-	1	-	
Orthopedics & General Surgery	6	1	16	4	500	-	1 Consult room
Ophthalmologist and Optometry	3	1	20	-	-	-	

Question 69: Please identify any issues or impediments to providing medical services at your facility.

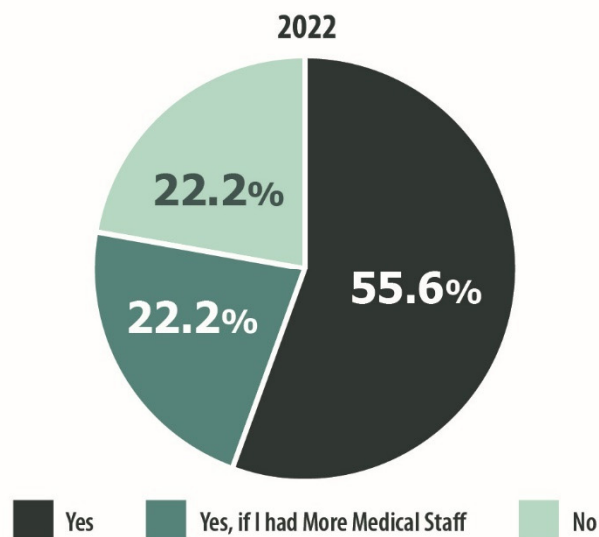
This question was added in 2022 to allow more data collection about medical facility challenges. Only two participants answered this question, with one noting limited parking, and another noting a lack of medical providers for the number of referred patients.

Question 70: Are there any opportunities to expand and/or enhance services at your facility?

In 2012, respondents reported 50/50 on being able to expand services at their facility. In 2022, two respondents said they did not have room, two noted they lacked enough medical staff to expand services and facilities, and five said they did have room to expand.

Question 70

Are there any opportunities to expand and/or enhance services at your facility?

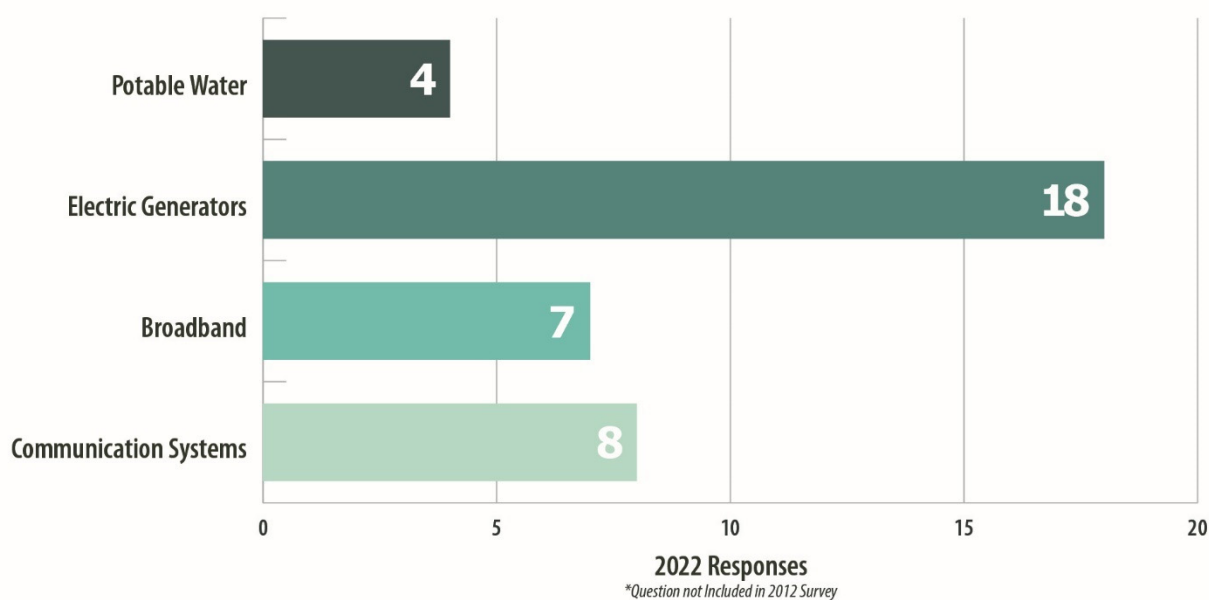


Question 71: Does your facility contain the critical infrastructure necessary to provide services, including during/after manmade or natural disasters (e.g., tropical storms, earthquakes, etc.), or other times of disturbance?

There were no questions about disaster preparedness in 2012, so in 2022 this question was added. Seventeen (17) participants answered this question. 5.8% (one respondent) reported having no infrastructure to provide services in a disaster. 95% reported having electric generators, 45% reported having communication systems. 35% reported having broadband services, and 15% reported keeping potable water on hand.

Question 71

Does your facility contain the critical infrastructure necessary to provide services, including during/after man-made or natural disasters (e.g., tropical storms, earthquakes, etc.), or other times of disturbance?*

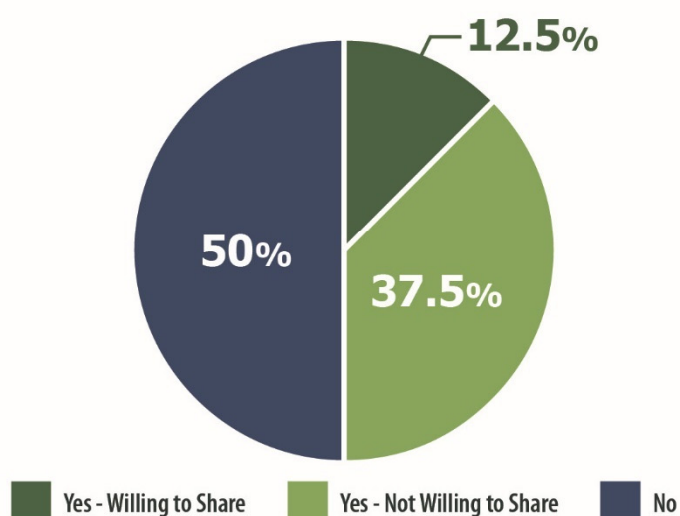


Question 72: Does your facility maintain a disaster preparedness plan/procedure that can be implemented following natural or manmade disasters, as well as other unexpected impacts? And; Question 73: If yes, can you provide a copy of the plan/procedures?

There were no questions about disaster preparedness in 2012, so in 2022 this question was added. Half of the 16 respondents reported having an emergency plan or procedure ready to carry out. Only two of these were willing to provide a copy of their plan or procedures.

Question 72 & 73

Does your facility maintain a disaster preparedness plan/procedure that can be implemented following natural or man-made disasters, as well as other unexpected impacts?
If so, are you willing to share?



Question 74: Is your facility and/or organization taking any action in preparation of increased demand due to the Guam buildup. If yes, explain

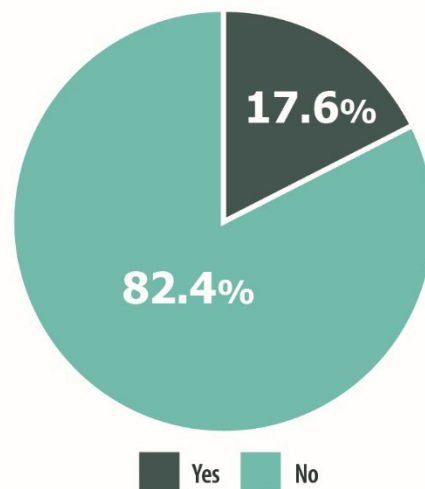
There were no questions about growth plans in 2012, so in 2022 this question was added. Seventeen (17) participants answered this question, with 14 saying they had no plans to meet growing demand.

The three participants who said they were preparing for the Guam buildup reported planning the following actions:

- Always looking at potential growth opportunities and patient needs/demand for services
- Preparing for increasing number of patients being referred for nephrology consultations
- Renovation and relocation

Question 74

Do practitioners from this facility directly provide any in-home care services?



If yes explain:

Always looking at potential growth opportunities, patient needs/demand for services; Increasing number of patients being referred for nephrology consultations; and Renovation and relocation.

Question 75: Does your practice use an electronic medical record (EMR) or electronic health record (EHR) system? Do not include billing record systems. And; Question 76: if No, are there plans for installing an EMR/HER system within the next 18 months?

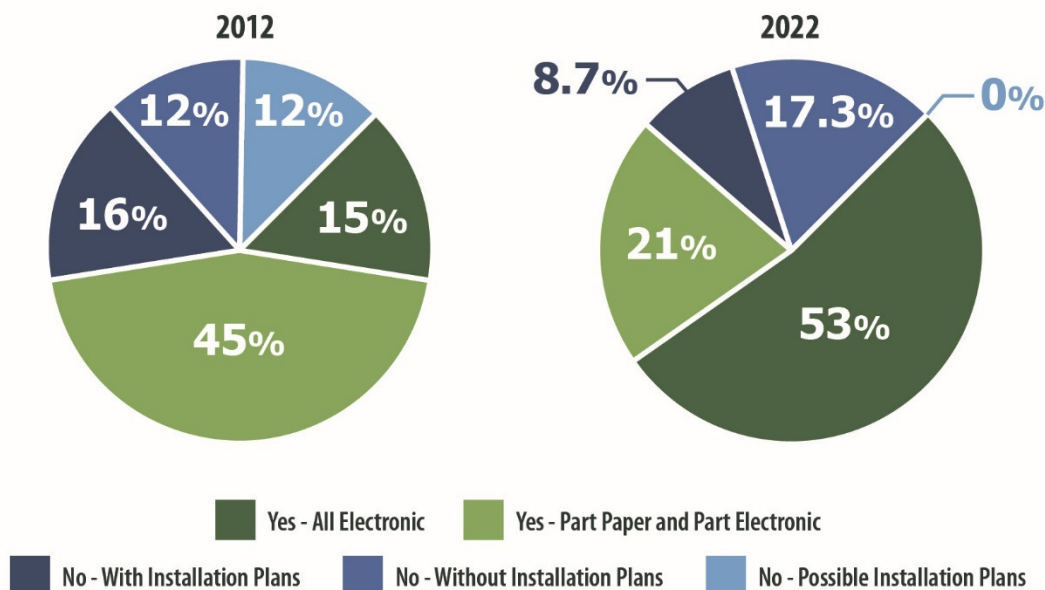
In 2012 the majority of respondents stated they either did not offer electronic medical record (45%) or that they offered both electronic and paper (40%). Only 15% of providers in 2012 offered fully electronic records.

In 2022, there has been some improvement. Of the 21 responses to this question, 47% of providers offer fully electronic records; 23% of providers offer both paper and electronic. Only 28% of providers rely on paper-only records.

In regards to plans to install an EMR/HER system within the next 18 months, the answers in 2012 were split, with 30% answering “maybe,” 30% “no,” and 40% “yes.” In 2022, only four providers answered this question. One said it did have plans to install an EMR/HER system within the next 18 months; the other three did not have plans to begin implementation in the near future.

Question 75 & 76

Does your practice use an electronic medical record (EMR) or electronic health record (EHR) system? Do not include billing record systems.
If no, are there any plans for installing and EMR/EHR system within the next 18 months?



Question 77: What is the name of your facility's current EMR/HER system?

In 2012, only eight participants were using EMR/HER and able to name the system they used. (list names?) In the 2022, several EMR/HER systems were listed. Participants named the following:

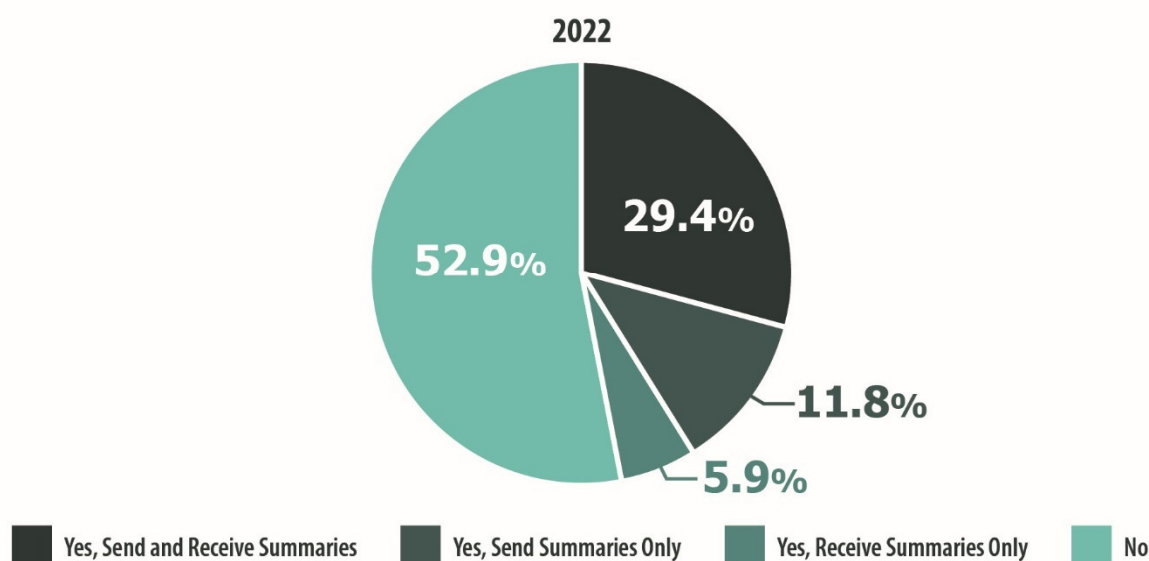
- eClinicalWorks
- eMD
- Greenway Medical/med300
- NextGen
- Practice Fusion
- ACOM health
- Compulink
- Aprima PRM
- Therapy Appointment
- ALLMED
- Amazing Charts
- Alta Point
- Praxis
- WebPT (two respondents)
- Varian ARIA

Question 78: Does your facility exchange patient clinical summaries electronically with any other providers?

This question was added in 2022 to help provide additional insight on the integration of electronic patient information. Most providers (57%) said they did not, but a few were able to send and receive summaries (26%), two could send summaries but not receive them (10%), and one (5%) was able only to receive summaries.

Question 78

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



Question 79: What is the annual budget for the facility?

This question was added in 2022. Only six respondents answered this question. Answers are summarized below.

Question 79

What is the annual budget for the facility?

Type of Facility	Budget
General Practice/Family Medicine	Private Info
Chiropractor	\$100,000
Child Psychiatrist	\$330,000
Orthopedics/General Surgery	\$2,500,000
Ophthalmologist/Optometrlist	\$2,700,000

Question 80: What are the sources of funding for your organization? (select all that apply)

Of the 15 participants who answered this question, most (93%) identified their primary source of funding as private reimbursements. Additionally, one participant identified federal grants as a source of funding, one identified the GovGuam general fund, one specified “other” (primarily insurance), and one specified “other” with “payment for services rendered” as the primary source.

It is believed that this question could have been worded more clearly to help participants identify which sources of funding applied to their organization.

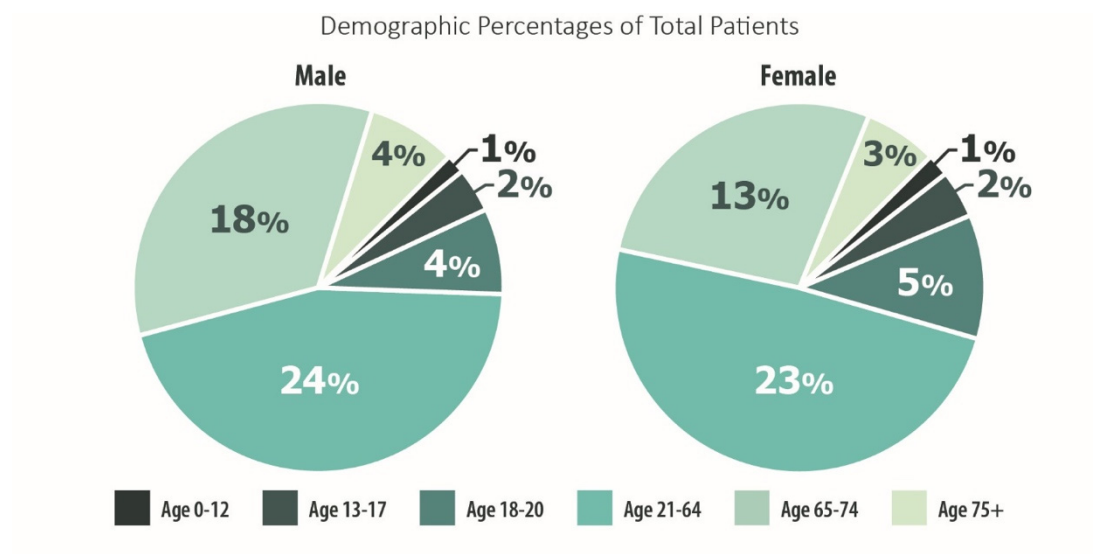
Question 81 Patient demographics: gender

About 11 participants laid out the demographics of their patients. The reported demographics are summarized below:

Question 81

Patient Age & Gender by Provider

Provider	Male						Female					
	Age 0-12	Age 13-17	Age 18-20	Age 21-64	Age 65-74	Age 75+	Age 0-12	Age 13-17	Age 18-20	Age 21-64	Age 65-74	Age 75+
Provider 1	-	-	-	25.5%	15.3%	7.1%				39.8%	7.1%	5.1%
Provider 2	-	-	-	-	-	-						
Provider 3	-	-	-	-	-	-						
Provider 4	-	7.0%	10.0%	30.0%	2.50%	0.50%		7.0%	10.0%	30.0%	2.50%	0.50%
Provider 5	-			5.0%	40.0%	5.0%				5.0%	40.0%	5.0%
Provider 6	0.7%	0.2%	0.3%	29.1%	16.6%	10.6%	0.9%	0.2%	0.2%	22.0%	10.3%	9.0%
Provider 7	5.0%	10.0%	10.0%	20.0%	10.0%	10.0%	10.0%	10.0%	10.0%	20.0%	30.0%	
Provider 8	-	-	-	-	-	-						
Provider 9	-	-	-	-	-	-		1.0%	6.0%	93.0%	1.0%	
Provider 10	-	-	14.7%	29.4%	4.9%	1.0%			14.7%	24.5%	9.8%	1.0%
Provider 11	-	-	-	-	-	-						
Provider 12	-	-	-	-	-	-						
Provider 13	1.0%	1.0%	1.0%	20.0%	20.0%	7.0%	1.0%	1.0%	1.0%	20.0%	20.0%	7.0%
Provider 14	-	-	1.0%	30.0%	20.0%	1.0%			5.0%	25.0%	17.0%	1.0%
Provider 15	-	-	-	20.0%	60.0%	-				10.0%	10.0%	
Percentage of Total Patients	1.0%	1.0%	1.0%	20.0%	20.0%	7.0%	1.0%	2.0%	5.0%	23.0%	13.0%	3.0%



Question 83: What is the estimated percentage of patients that come from each Village/location?

Only five participants answered this question. They noted the following trends in location among their patients:

Question 83

Percentage of Total Patients from Each Village

Guam Villages	Provider 1	Provider 2	Provider 3	Provider 4	Percentage of Total Patients
Agana Heights	0.9%	10.0%	10.1%	-	4%
Agat	2.6%	10.0%	10.1%	-	4%
Asan-Maina	-	-	5.1%	-	2%
Barrigada	3.5%	5.0%	15.2%	-	6%
Chalan Pago-Ordot	2.6%	1.0%	5.1%	-	3%
Dededo	18.3%	-	20.2%	41.7%	27%
Hagåtña	1.7%	10.0%	10.1%	-	4%
Inarajan	1.7%	1.0%	5.1%	-	2%
Mangilao	6.1%	1.0%	5.1%	16.7%	9%
Merizo	1.7%	2.0%	5.1%	-	2%
Mongmong-Toto-Maite	3.5%	-	1.0%	-	1%
Piti	1.7%	1.0%	1.0%	-	1%
Santa Rita	1.7%	2.0%	1.0%	-	1%
Sinajana	3.5%	5.0%	3.0%	-	2%
Talofofo	1.7%	10.0%	1.0%	-	1%
Tamuning	7.0%	40.0%	2.0%	25.0%	11%
Umatac	0.0%	1.0%	-	-	0%
Yigo	7.8%	-	-	-	3%
Yona	4.3%	-	-	-	1%
Off-Island	14.8%	-	-	-	5%
Other	0.0%	-	-	-	0%
Northern Mariana Islanders	14.8%	-	-	-	5%
Other Pacific Islanders	-	-	-	-	0%
Asian	-	-	-	-	0%
Native/Indigenous	-	-	-	-	0%
Active Duty Military or Their Dependents	-	-	-	16.7%	6%
Other	-	-	-	-	0%

Question 84: What percentage of patients are not permanent Guam residents?

This question was asked in two parts in 2012, first asking what percent of patients Guam residents were not, then asking what percent of patients were military. To provide clearer data, as many non-residents are also military, these questions were combined into one in 2022, with a military category offered in the

question. Only two participants answered this question in the 2022 survey. As shown in the table for question 83(above,) 6% of patients seen at the two private providers who answered the question are active-duty military or their dependents.

Question 85: What percentage of patients are serviced under the Compact of Free Association, and; Question 86: What percentage of patients are serviced through the Medical Indigent Program?

Only four participants provided data on patients served under the Compact of Free Association. The results are less than 5% at one provider, 1% at another, and zero at the other two.

Eight participants reported on the percent of patients served through the Medical Indigent Program. The highest percent of patients served under this program was 40%.

One participant stated that the percentages served through these programs was not known.

Question 87: Please briefly describe common restrictions or constraints on providing services needed by your patients, if any.

Five participants articulated some of the common restrictions to providing patient services.

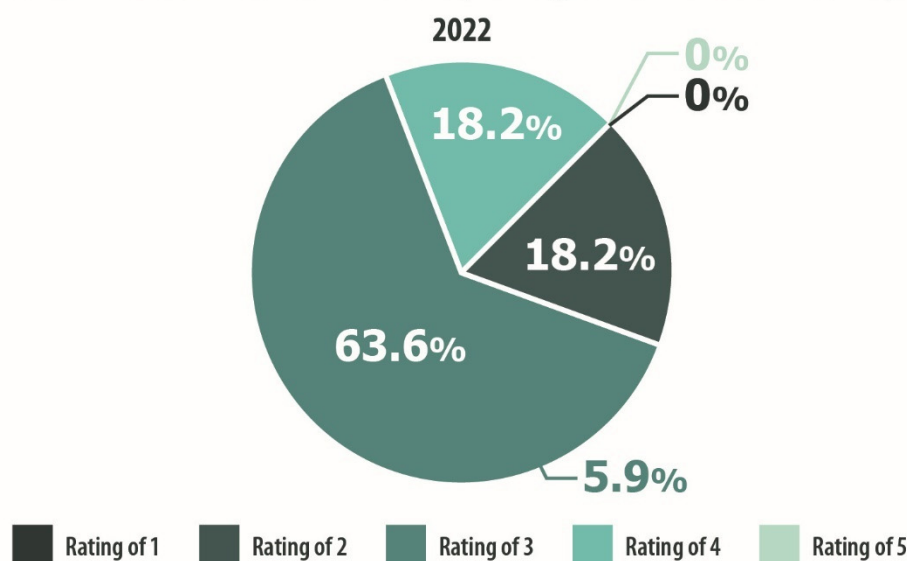
- Two providers cited Medicaid and MIP authorization approval and timely payments.
- Two providers noted that patients have transportation issues and unreliable bus lines to contend with.
- Another said that they do not accept Medicaid at all, impeding its patients.

Question 88: How would you rate the quality of medical care/health services provided on the Island of Guam on a scale of 1 to 5 (1 being the worst and 5 the best)?

This question was added in the 2022 survey. It allows providers to surmise the quality of medical coverage. Of the 14 that answered this question, no respondent rated the quality of medical care and health services as the worst (1) or the best (5). The average and predominant answer was 3.

Question 88

How would you rate the quality of medical care/health services provided on the Island of Guam on a scale of 1 to 5 (1 being the worst and 5 the best)?



Question 89: Please elaborate on your rating as to what works well and what does not work well.

Five participants elaborated on their answers. Their recommendations are noted verbatim below:

- There is always room to improve the quality of health care in Guam. However, Guam needs more specialty providers.
- The major problem is a lack of specialists.
- More recruitment of physicians, on-time insurance reimbursements.
- Need more specialists and ancillary staff like nurses
- Missing key specialties. Bloated and inefficient hospitals.

Question 90: What could be done to improve medical care / health care on the Island of Guam?

Seven participants elaborated on this answer, provided verbatim below:

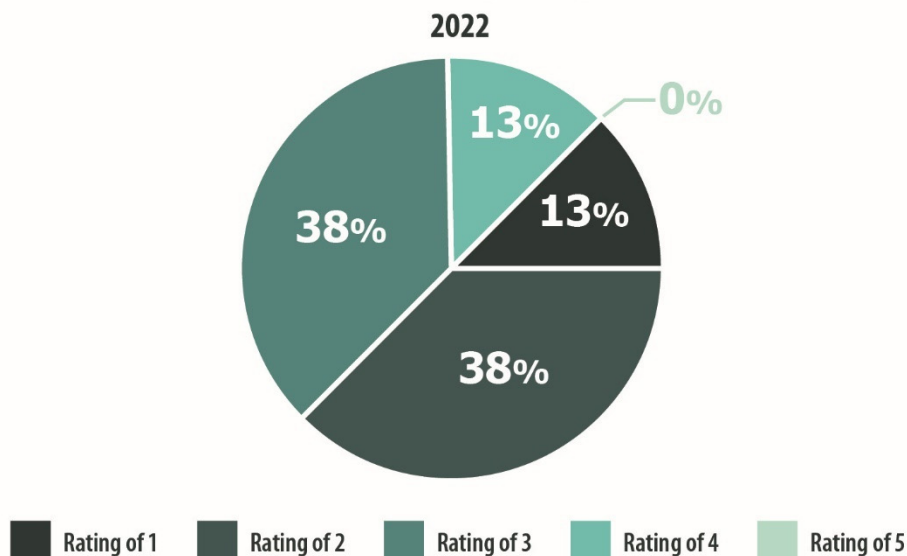
- Create better opportunities for specialty healthcare providers that are most needed for the people of Guam
- We need a higher number of specialists because we are isolated
- Put GMH into federal receivership. GovGuam can't handle trash and it can't handle healthcare either
- Lower insurance premiums and increase provider reimbursements
- More recruitment of physicians, on-time insurance reimbursements
- Programs to boost preventative health
- Streamline hospitals and recruit needed specialists

Question 91: How would you rate the quality of social services/mental health services provided on the Island of Guam on a scale of 1 to 5? (1 being the worst and 5 the best)

This question was added to the 2022 medical provider survey. Nine participants answered it. No participants rated mental health and social services as the best (5). The average answer was 3.

Question 91

How would you rate the quality of social services/mental health services provided on the Island of Guam on a scale of 1 to 5 (1 being the worst and 5 the best)?



Question 92: Please elaborate on your rating as to what works well and what does not work well.

Two respondents elaborated on their answers. Their responses are noted verbatim below:

- Lack of efficiency in programs for the people
- I'm currently the only psychiatrist in private practice. We need more specialists, especially Child Psychiatrist Ideally you should have one psychiatrist for every 20,000 in the population.

Question 93: What could be done to improve social services/mental health services on the Island of Guam?

The answers to this question were the same as above, in question 92.

Question 94: Do you feel Guam residents are well informed on medical/health care services options?

Respondents could choose between “well-informed,” “well-informed on certain issues,” and “limited information.” 53% chose “limited information” and 46% chose “well-informed on certain issues.” None of the providers thought the residents of Guam were “well-informed.”

Question 95: How is information on medical/health care services disseminated?

Five survey participants elaborated on this. Their answers included:

- News broadcasts, social media, word of mouth
- Word of mouth (two respondents)
- One-on-one conversations with patients and clients from providers, nurses, and Title 3 programs under our company
- News or referrals

Question 96: Do you feel Guam residents are well informed on social services/mental health care options?

Respondents could choose between “well-informed,” “well-informed on certain issues,” and “limited information.” The answers were evenly split between “well-informed on certain issues” and “limited information.”

Question 97: How is information on social services/mental health care disseminated?

Four survey participants elaborated on this. Their answers are noted verbatim below:

- News broadcasts, social media, word of mouth
- Word of mouth
- One-on-one conversations with patients and clients from providers, nurses, and Title 3 programs under our company
- There is more awareness of the different services on the island.

Question 98: To what extent is your organization involved in the development of public policy in Guam?

Seven survey participants answered this question. Their answers are noted verbatim below:

- Little to no involvement
- None (two respondents)
- None by company policy
- Little to none
- Not very much
- Our owner is very involved in community organizations, provides testimony when needed, and will call government officials regarding patient challenges and so forth.

Question 99: What would be your recommendations for Guam to improve health and social outcomes on the island of Guam over the next 5-10 years?

Six survey participants answered this question. Their answers are noted verbatim below:

- Create more opportunities for medical professionals and improve current programs to help the island.
- Entice specialty care specialists, fund, and support a well-functioning medical licensing board.
- Improve early intervention and screening.
- Lower insurance premiums and increase provider reimbursements.
- Step up recruitment of physicians and on-time insurance reimbursements to sustain the small businesses in health care.
- Recruit needed specialists and recruit to replace aging physician population.

Question 100: Has your facility implemented any changes following the COVID-19 pandemic?

This question was added to the 2022 survey considering the ongoing COVID-19 pandemic. Of the 13 who participated in this question, 92% said yes. Only one facility had not implemented changes. The providers elaborated on the changes they had implemented, noted verbatim below:

- Limiting the people allowed to enter the clinic.
- Tele-health appointments are now available upon request.
- Limiting the number of patients in the office, face guards and masks, and air purification system.
- Implemented standard CDC guideline changes.
- We wear masks.
- Social distancing and limiting the number of people allowed in the facility.
- Temperature checks, routine screening, COVID testing, hand hygiene stations.
- Restricted access to facility, temperature screening, and COVID symptom questionnaire screening.
- More frequent sanitization, limited number of patients.

Question 101: What changes do you foresee that will change the way medical services are provided?

Four participants had ideas on ways that medical services might change, noted verbatim below:

- Having more tele-medicine consultations.
- Increasing use of telemedicine.
- On-time insurance reimbursements. If insurance companies pay on time, there will be fewer financial constraints, while small businesses will be able to upgrade equipment and provide better medical services.
- More disruptive interference by the federal government with largely negative consequences.

Question 102: Does your organization issue an annual report and; Question 103: if yes can you provide a copy?

Eleven participants answered this question. Eight stated that they did not issue an annual report. The remaining three stated that they did, but none was willing to provide a copy.

Question 104: Are there other important health and social issues that should be discussed for a long-term plan?

Only two participants had something to say about this question. They noted:

- How to recruit and train specialists necessary to replace the aging population of physicians.
- Elderly programs need more funding and support.

5.1. Key Findings

- 20 facilities have closed and 26 have opened since the 2012 Guam Medical Action Plan reported on Medical Care on the Island
- Solo Practices have become more common, with over half the private medical providers on island operating as single specialty, solo provider clinics operating out of a single location
- Overall, the island health practitioners have gotten better equipment since 2012
- Electronic Health Records and tele-health use has become more commonplace
- Provider report having physically limiting spaces, but many indicate their current facilities are adequate.
- Hours of operation have shortened from 2012, and have not returned to pre-covid levels since the pandemic began. Same day visits are not as accessible as in 2012, and overall it takes longer to schedule appointments.
- Patients tend to be Male, largely from outside of central Guam, in villages like Dededo.
- There is a need to expand mental health services
- Health education is lacking and most public education relies on word-of-mouth.
- Insurance is one of the most significant factors inhibiting private providers from providing services to patients. Sometimes providers have to wait too long for approval of claims before services can be provided, but sometimes the needs of the patient preclude waiting. Also, certain types of medicine must receive authorization from insurance companies before being administered to patients.
- Some patients have no insurance and cannot be seen. In addition, private providers have experienced problems getting reimbursement for government insurances such as MIP Medicaid and Medicare and have been forced to cut back on seeing patients covered by these insurance programs.
- There is a general inability to keep up with patient demand, with a high number of patients requesting same day appointments who cannot be accommodated because of full schedules.
- A number of medical specialties have insufficient practitioners to support the population, including:
 - Radiologists;
 - Oncologists;
 - Cardiologists;
 - Neurologists;
 - Pulmonologists;
 - Dermatologists;
 - Gastroenterologists;
 - Rheumatologists;
 - Pediatric cardiologists;
 - Neurosurgeons;
 - Urologists;
 - Hematologists,
 - Biomedical engineers; and
 - Ear, nose, and throat doctors.
- A doctor on the island can perform kidney transplants, but no facilities are available on Guam to perform this operation, so patients must leave the island.
- As most providers are located centrally it can be difficult for patients to reach the providers
- Limited staffing and storage space for the providers

6. Department of Defense Health Care Facilities

The Department of Defense (DoD) operates multiple health care facilities on Guam to support Armed Forces personnel and retirees on Guam. These facilities also provide some support to the civilian community during times of need, such as during the COVID-19 pandemic.

Health care is currently delivered to the military population on Guam through the Guam Naval Hospital and a handful of clinics across the island. As the number of Armed Forces members on the island swells during the relocation from Japan of 8,000 marines and their 9,000 dependent family members, the DoD health care facilities will require an overhaul and expansion to accommodate. Most recently, a complete replacement of the Guam Naval Base Clinic, and a new Base Health Clinic in Finegayan have been implemented to accommodate the military population on island.

Since the Medical Delivery Plan is designed to give insights on the civilian health care network on Guam, DoD facilities were not approached for interview or survey during the 2022 update. Instead, information was obtained from DoD-operated websites and other published information on operations at Joint Region Marianas Command on Guam. This section is merely an overview of the current health care systems managed and monitored by DoD.

6.1. Guam Naval Hospital

The Guam Naval Hospital was opened in 2014, replacing the old facility in Agana Heights. The modern 282,000-square-foot replacement facility is designed to address the capacity of future needs of Guam's growing military population and their dependents. The new hospital is patient-centric and allows more flexibility in space utilization, such as more room for guests and family members and the ability to convert doctor's offices into examination/treatment rooms in case of surges. As part of this increased efficiency, the replacement facility was intentionally designed smaller to improve proximity between staff and patients and reduce travel distances for patients. The design relocated lower utilized clinics and services to the upper floors, allowing the high demand services to be located near entrances and exits. Among its other upgraded amenities, the new hospital includes 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 design was paired with modern equipment. These improvements have directly correlated to the quality of care for patients by enhancing current services and capabilities. Services provided at the hospital include:

- General/family and internal medicine,
- Family practice,
- Internal medicine,
- MRI
- OB/GYN, and
- pediatrics.

Specialties include:

- Anesthesia,
- Dental surgery,
- Emergency medicine,
- General surgery,
- Ophthalmology,
- Optometry,
- Otolaryngology,
- Physical therapy, and
- Urology.

Specialties include:

- Anesthesia,
- Dental surgery,
- Emergency medicine,
- General surgery,
- Ophthalmology,
- Optometry,
- Otolaryngology,
- Physical therapy, and
- Urology.

Mental health services include:

- Psychiatry,
- Psychology, and
- Social work.

Wellness and prevention programs include:

- Health promotions,
- Nutrition, and
- Occupational health and preventive medicine.

6.2. Naval Branch Health Clinics

Two new clinics were built within the last ten years, in conjunction with the new Naval Hospital. These clinics are located on Navy grounds and provide services including:

- Primary care,
- Dental care,
- Limited urgent and extended hours care,
- Mental health care,
- Ancillary services,
- Preventive medicine, and
- Support services.

6.2.1. Apra Harbor Clinic

The 49,332-square-foot clinic was completed in 2013, giving military personnel and dependents access to outpatient services such as primary care, family practice, pharmacy services, a dental clinic, mental health services, a physical therapy clinic, preventive medicine, and acute care services within reach of the naval base.

6.2.2. North Finegayan Clinic

The future Naval Branch Clinic (NBC) North Finegayan will be on the Marine Corps base and offer services to eligible beneficiaries.

The clinic is anticipated to be 64,078 square feet and offer similar services to those of NBC Apra Harbor to eligible personnel and dependents. NBC North Finegayan supports outpatient services such as primary care and family practice, pharmacy services, a dental clinic, mental health services, a physical therapy clinic, and preventive medicine.

6.3. Veterans Clinic

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

6.4. Andersen Clinic

The health clinic at Andersen Air Force Base primarily serves the military population and their dependents stationed there. The clinic is open Monday through Friday from 8:00 a.m. to 5:00 p.m. 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, 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 programs and wellness services, immunizations, dental, occupational medicine, mental health, social work, and family advocacy services, as well as the ability to perform minor surgical procedures.

7. Appendix

7.1. Letter from the Governor

LOURDES A. LEON GUERRERO
GOVERNOR



JOSHUA F. TENORIO
LT. GOVERNOR

UFISINAN I MAGA'HĀGAN GUĀHAN
OFFICE OF THE GOVERNOR OF GUAM

September 7, 2021

Hafa Adai:

My administration is actively pursuing the vital initiative to replace our aging public hospital to better service the medical and healthcare needs of our island community and our region. To this end, the Government of Guam is planning to construct a medical campus that will be the home for our new public hospital and other state-of-the-art medical facilities. Part of this effort entails collection of vital information from our healthcare provider community partners. My consultant team, Matrix Design Group, has been tasked to collect this information. Your participation through completion of the attached questionnaire will help us develop a better understanding of the overall medical services delivery system in Guam, which will in turn help us develop plans for our new hospital and medical campus. Additionally, Matrix may be contacting your office or clinic to schedule an in-person survey interview with you or your designated representative. If you believe that any portion of the information you provide is confidential, you can inform my consultant team and they will aggregate the identified portion to address any proprietary concerns. Please be assured that your participation in this effort is not intended to affect your ability to participate in future opportunities associated with the new medical campus, and that it may, in fact, help facilitate your organization's future collaboration with the medical campus.

I appreciate your support on this important initiative and your cooperation with the Matrix Design Group in their efforts to collect this vital data from your organization. If you have any questions or comments, please contact Melanie Mendiola of the Guam Economic Development Authority (GEDA) at melanie.mendiola@investguam.com at (671) 647-4332.

Senseremente,

A handwritten signature in blue ink, appearing to read "Lou Leon Guerrero".

LOURDES A. LEON GUERRERO
Maga'hāgan Guāhan
Governor of Guam

7.2. Electronic Survey

Guam Medical Provider Survey

1. Name of practice / organization: _____
2. Survey completed by: _____
3. Facility Contact Information Note: If your organization has more than one facility, please fill out a survey for each facility. _____
4. Website: _____
5. Number of years in existence: _____
6. What type of services does your facility provide?
 - ☐ Critical/Emergency services
 - ☐ Ambulatory outpatient services
 - ☐ Mental health services
 - ☐ Nonclinical support services / ancillary services
7. Who owns the practice?
 - ☐ Private physician or physician group
 - ☐ Community health center
 - ☐ Hospital
 - ☐ GovGuam
 - ☐ Military
 - ☐ Other Federal entity
 - ☐ HMO
 - ☐ Medical / Academic health center
 - ☐ Other (please specify): _____
8. Is this facility operated as a solo practice?
 - ☐ Yes
 - ☐ No
9. Is this a single-specialty or multi-specialty group practice?
 - ☐ Single-Specialty
 - ☐ Multi-Specialty
 - ☐ Other _____
10. What area(s) of specialty does your facility focus (e.g., Cardiology, Oncology, Pediatrics, Family Medicine, Women's Health, etc.)?

Specialty Service Provided	Number of Patients in Past Week
<input type="checkbox"/> Internal Medicine	_____
<input type="checkbox"/> Pediatrics	_____
<input type="checkbox"/> Radiology	_____
<input type="checkbox"/> Family Medicine	_____
<input type="checkbox"/> Oncology	_____
<input type="checkbox"/> Radiology	_____
<input type="checkbox"/> Nephrology	_____
<input type="checkbox"/> OB-Gynecology	_____
<input type="checkbox"/> Behavioral Counseling	_____
<input type="checkbox"/> Cardiology	_____
<input type="checkbox"/> Dental	_____
<input type="checkbox"/> Ophthalmologists	_____
<input type="checkbox"/> Optometry	_____
<input type="checkbox"/> Neurology	_____
<input type="checkbox"/> Pulmonology	_____
<input type="checkbox"/> Endocrinology	_____
<input type="checkbox"/> Pharmacy	_____
<input type="checkbox"/> Orthopedics	_____
<input type="checkbox"/> Laboratory Diagnostic Services	_____
<input type="checkbox"/> Other (please specify)	_____
<input type="checkbox"/> Other (please specify)	_____
<input type="checkbox"/> Other (please specify)	_____

11. Additionally, please provide 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.

Specialty Service Provided	Number of Patients in Past Week
<input type="checkbox"/> Internal Medicine	_____
<input type="checkbox"/> Pediatrics	_____
<input type="checkbox"/> Radiology	_____
<input type="checkbox"/> Family Medicine	_____
<input type="checkbox"/> Oncology	_____
<input type="checkbox"/> Radiology	_____
<input type="checkbox"/> Nephrology	_____

- ☐ OB-Gynecology
- ☐ Behavioral Counseling
- ☐ Cardiology
- ☐ Dental
- ☐ Ophthalmologists
- ☐ Optometry
- ☐ Neurology
- ☐ Pulmonology
- ☐ Endocrinology
- ☐ Pharmacy
- ☐ Orthopedics
- ☐ Laboratory Diagnostic Services
- ☐ Other (please specify)
- ☐ Other (please specify)
- ☐ Other (please specify)

[illegible]

Please identify the major diagnostic equipment your facility contains, as well as the quantity and general utilization rate.

Equipment	Quantity	Utilization Rate (low, medium, high)
12. EKG/ECG		
13. Chemotherapy/Radiation therapy		
14. CT/CTA Scan		
15. Dialysis		
16. Lab Testing		
17. Mammography		
18. MRI		
19. PCR		
20. PET Scan		
21. Polysomnography		
22. Spirometry		
23. Ultrasound		

24. Vitals Machine

25. X-Ray

26. Other (please specify):

27. Other (please specify):

28. Other (please specify):

29. Is the diagnostic equipment identified at your facility adequate to meet your patients' needs? ☐ Yes ☐ No

30. please identify the equipment and quantity your facility is lacking.

Equipment	Quantity
<input type="checkbox"/> EKG/ECG	
<input type="checkbox"/> Chemotherapy/Radiation therapy	
<input type="checkbox"/> CT/CTA Scan	
<input type="checkbox"/> Dialysis	
<input type="checkbox"/> Lab Testing	
<input type="checkbox"/> Mammography	
<input type="checkbox"/> MRI	
<input type="checkbox"/> PCR	
<input type="checkbox"/> PET Scan	
<input type="checkbox"/> Polysomnography	
<input type="checkbox"/> Spirometry	
<input type="checkbox"/> Ultrasound	
<input type="checkbox"/> Vitals Machine	
<input type="checkbox"/> X-Ray	
31. Other (please specify):	
32. Other (please specify):	
33. Other (please specify):	

34. Does your facility have adequate PPE and antiseptic supplies (e.g., gloves, gowns, masks, antibacterial wipes)?
- ☐ Yes
☐ No

35. Please identify what supplies your facility is lacking

Please indicate 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	Part-Time	Volunteer	Additional Staff Needed
36. Medical Professionals (MD, DO, DDS, etc.)				
37. Medical Professionals (RN, etc.)				
38. Mid-level providers (nurse practitioners, physician assistants, etc.)				
39. Medical Support (CNA, MA, LVN, etc.)				
40. Allied Health Professional (RT, dental hygienist, lab technician, social services worker, etc.)				
41. Administrative / Support				
42. Other				

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

44. Is there room to expand at this location?
- ☐ Yes
☐ No

45. How many locations does your organization operate from?

46. If your organization operates from multiple locations, how do these locations differ?

47. Does your organization maintain any memorandums of understanding or agreements with other organizations?

- ☐ Yes
☐ No

48. If 'Yes' to question 19, can you provide a copy?

- ☐ Yes
☐ No

49. Hours of Operation (enter in military time 0800 – 1600 would equal 8 am to 4 pm). If open 24 hours a day, select the 0000 option for both Open and Close dropdown menus. If not open on a given day, select the "CLOSED" option from the dropdown menus.

Monday:	<hr/>	to	<hr/>
Tuesday:	<hr/>	to	<hr/>
Wednesday:	<hr/>	to	<hr/>
Thursday:	<hr/>	to	<hr/>
Friday:	<hr/>	to	<hr/>
Saturday:	<hr/>	to	<hr/>
Sunday:	<hr/>	to	<hr/>

50. When your facility is closed, which of the following applies for non-emergency after-hour calls? check all that apply:

- ☐ An answering service screens calls
☐ The caller is directed to call back during office hours
☐ The caller is directed to call back during office hours and to leave a voicemail message
☐ An on-call physician is available to be reached after hours
☐ A nurse helpline is available
☐ The call is directed to another facility (e.g., Urgent Care)
☐ Other (please specify):

51. How many patients do you serve annually?

52. During the previous week (the week before you completed this survey, how many patient visits / encounters did you have at this location?

53. Are you currently accepting new patients?

- ☐ Yes
☐ No

54. Does your practice set time aside for same-day appointments?

- ☐ Yes
☐ No

55. if yes, roughly what percent of your daily visits are same day appointments?

%

56. 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
☐ This facility does not provide routine medical exams

57. Do practitioners from this facility directly provide any in-home care services?

- ☐ Yes
☐ No

58. Do practitioners from this facility provide any virtual or tele-health consultations?

- ☐ Yes
☐ No

Please identify which key working areas and patient areas this facility contains, along with the number and whether these are adequate to meet current patients' needs.

Type of Room	Number	Adequate to Meeting Patients' Needs?
59. Exam / Treatment Rooms		
60. Physician Offices		
61. Patient Waiting Area (number of seats)		
62. Recovery / In-Patient Beds (number of beds)		
63. X-ray		
64. Medical Supply Storage (square feet)		
65. Pharmacy		

66. – 68. Other key working areas / patient areas (please list below):

Type of Room	Number	Adequate to Meeting Patients' Needs?

69. Please identify any issues or impediments to providing medical services at your facility.

70. Are there any opportunities to expand and/or enhance services at your facility?

71. Does your facility contain the critical infrastructure necessary to provide services, including during/after manmade or natural disasters (e.g., tropical storms, earthquakes, etc.), or other times of disturbance?

- ☐ *Potable water*
- ☐ *Electric generators*
- ☐ *Broadband*
- ☐ *Communication systems*

72. Does your facility maintain a disaster preparedness plan/procedures that can be implemented following natural or manmade disasters, as well as other unexpected impacts?

- ☐ *Yes*
- ☐ *No*

73. If 'Yes' to question 38, can you provide a copy of the plan/procedures?

- ☐ *Yes*
- ☐ *No*

74. Is your facility and/or organization taking any action in preparation of increased demand due to the Guam buildup?

- ☐ *Yes*
- ☐ *No*

75. 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*

76. If 'No', are there plans for installing an EMR/HER system within the next 18 months?

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

- | | |
|---|---|
| <input type="checkbox"/> Allscripts | <input type="checkbox"/> MED 3000 |
| <input type="checkbox"/> Cerner | <input type="checkbox"/> NextGen |
| <input type="checkbox"/> CHARTCARE | <input type="checkbox"/> Sage |
| <input type="checkbox"/> eClinicalWorks | <input type="checkbox"/> SOAPware |
| <input type="checkbox"/> Epic | <input type="checkbox"/> Practice Fusion |
| <input type="checkbox"/> eMDs | <input type="checkbox"/> This facility does not use an EMR/EHR system |
| <input type="checkbox"/> GE Centricity | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Greenway Medical | _____ |

78. 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

79. What is the annual budget for the facility?

\$ _____

80. What are the sources of funding for your organization? (select all that apply)

- ☐ Federal grants
☐ Non-government grants
☐ GovGuam general fund
☐ Private reimbursements
☐ Other (please specify): _____

What is the average percentage breakdown of the patients at your facility by age and sex?

	Total	Age 0-12	Age 13-17	Age 18-20	Age 21-64	Age 65-74	Age 75+
81. Male	%	%	%	%	%	%	%
82. Female	%	%	%	%	%	%	%

83. What is the estimated percentage of patients that come from each Village / location?

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

84. What percentage of patients are not permanent Guam residents?

<i>Northern Mariana Islanders</i>	% _____
<i>Other Pacific Islanders</i>	% _____
<i>Asian</i>	% _____
<i>Native/Indigenous</i>	% _____
<i>Active duty military or their dependents</i>	% _____
<i>Other</i>	% _____

85. What percentage of patients are serviced under the Compact of Free Association?

% _____

86. What percentage of patients are serviced through the Medical Indigent Program?

% _____

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

88. How would you rate the quality of medical care / health services provided on the Island of Guam on a scale of 1 to 5 (1 being the worst and 5 the best)?

1 2 3 4 5

89. Please elaborate on your rating as to what works well and what does not work well.

90. What could be done to improve medical care / health care on the Island of Guam?

91. How would you rate the quality of social services / mental health services provided on the Island of Guam on a scale of 1 to 5 (1 being the worst and 5 the best)?

1 2 3 4 5

92. Please elaborate on your rating as to what works well and what does not work well.

93. What could be done to improve social services / mental health services on the Island of Guam?

94. Do you feel Guam residents are well informed on medical / health care services options?

- ☐ *Well informed*
- ☐ *Well informed on certain issues*
- ☐ *Limited information*

95. How is information on medical / health care services disseminated?

96. Do you feel Guam residents are well informed on social services / mental health care options?
- ☐ *Well informed*
☐ *Well informed on certain issues*
☐ *Limited information*

97. How is information on social services / mental health care disseminated?

98. To what extent is your organization involved in the development in public policy in Guam?

99. What would be your recommendations for Guam to improve health and social outcomes on the Island of Guam over the next 5-10 years?

100. Has your facility implemented any changes following the COVID-19 pandemic?
- ☐ *Yes*
☐ *No*

101. What changes do you foreshadow that will change the way medical services are provided?

102. Does your organization issue an annual report? ☐ *Yes*
☐ *No*

103. If 'Yes', can you provide a copy of the annual report? ☐ *Yes*
☐ *No*

104. Are there other important health and social issues that should be discussed for a long-term plan?

7.3. Interactive GIS Database Instructions

How To Use

Link:

<https://gis-map-fe.matrixdesigngroup.com/portal/apps/webappviewer/index.html?id=25de03c4327b4a2599e219bd21ffca3b>

[Click Here](#)

This mapping tool is a list of medical service providers in Guam. You can search for all providers within a certain distance of an address or your current location. You can also filter results by provider type (i.e. pediatrics, dental, medical goods, medical practices).



Click the arrow at the left side of the map to open or close this information panel.



Click “+” to zoom in. Click “-” to zoom out. You can also use your mouse scroll button or pinch-to-zoom on your smart phone.



Click to reset the map view.



Click to open and close the “Near Me” tool.

You can enter any address or place in the search bar to show medical providers within a certain distance. Adjust the search area by entering a search radius (i.e. 0.5) or using the slider.

You can also:



Click to center the map on your current location and search for providers within a certain distance. If your location information is not available a message will appear.



Click this, then click on the map, to select any location on the map and search for providers within a certain distance.

A listing of providers will appear in the “Near Me” tool. Click on a provider for details including the provider’s website and provider type.



Click to filter the results by provider type.











Click the toggle to turn a category on/off.



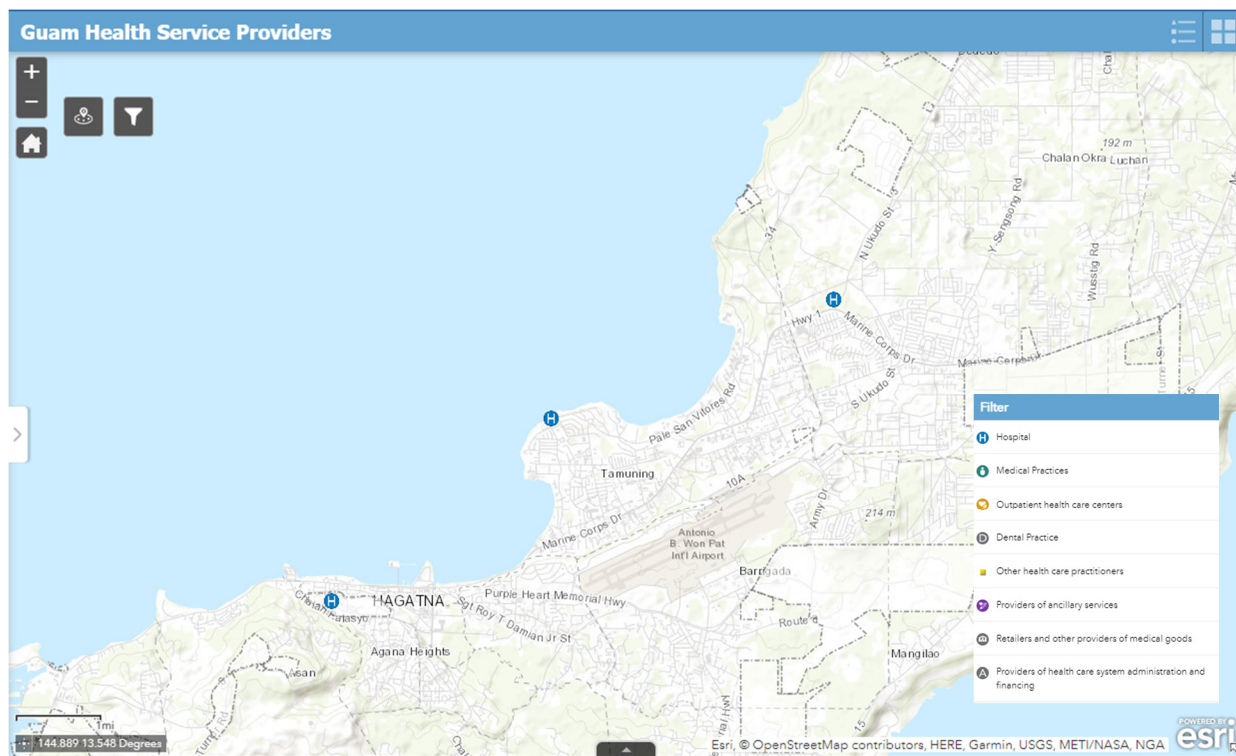
Click the arrow at the bottom of the map to see a list of health service providers.

The information provided may be subject to errors or omissions. Although this information will be updated periodically, there is no guarantee of the accuracy or completeness of the information on this website.

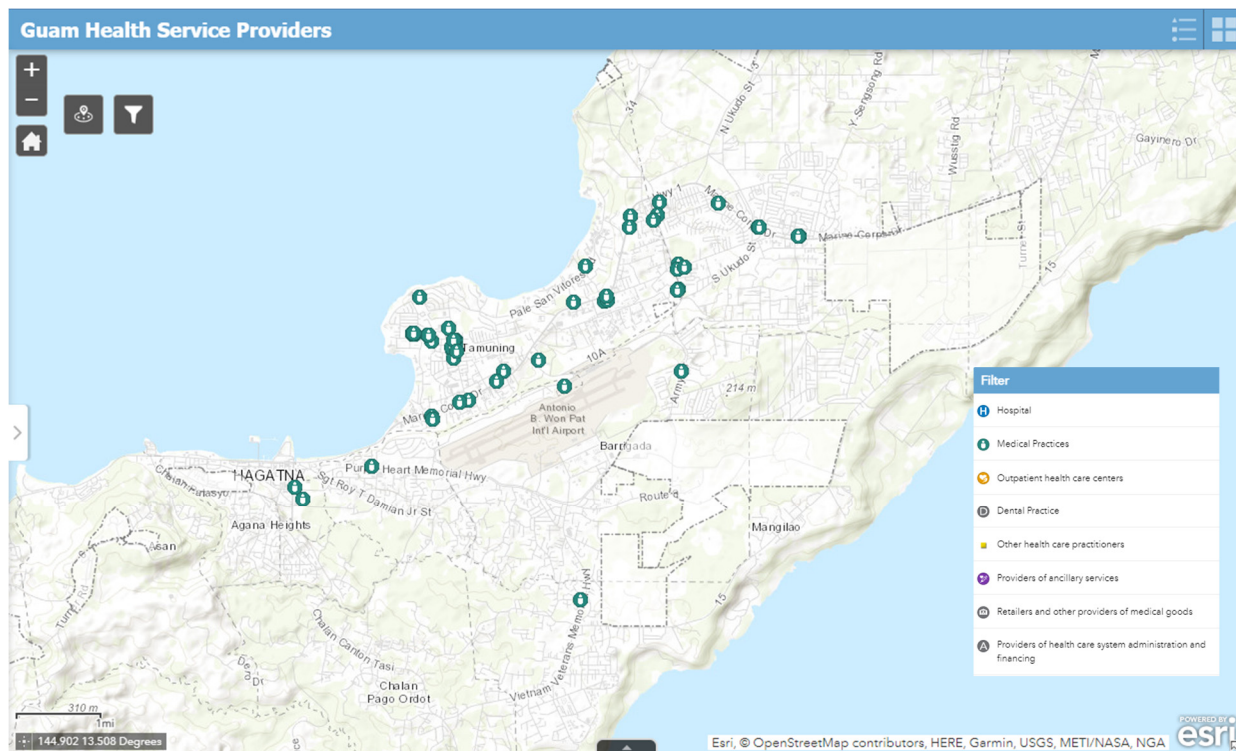
Legend of the Interactive GIS Database Tool

Filter	
	Hospital
	Medical Practices
	Outpatient health care centers
	Dental Practice
	Other health care practitioners
	Providers of ancillary services
	Retailers and other providers of medical goods
	Providers of health care system administration and financing

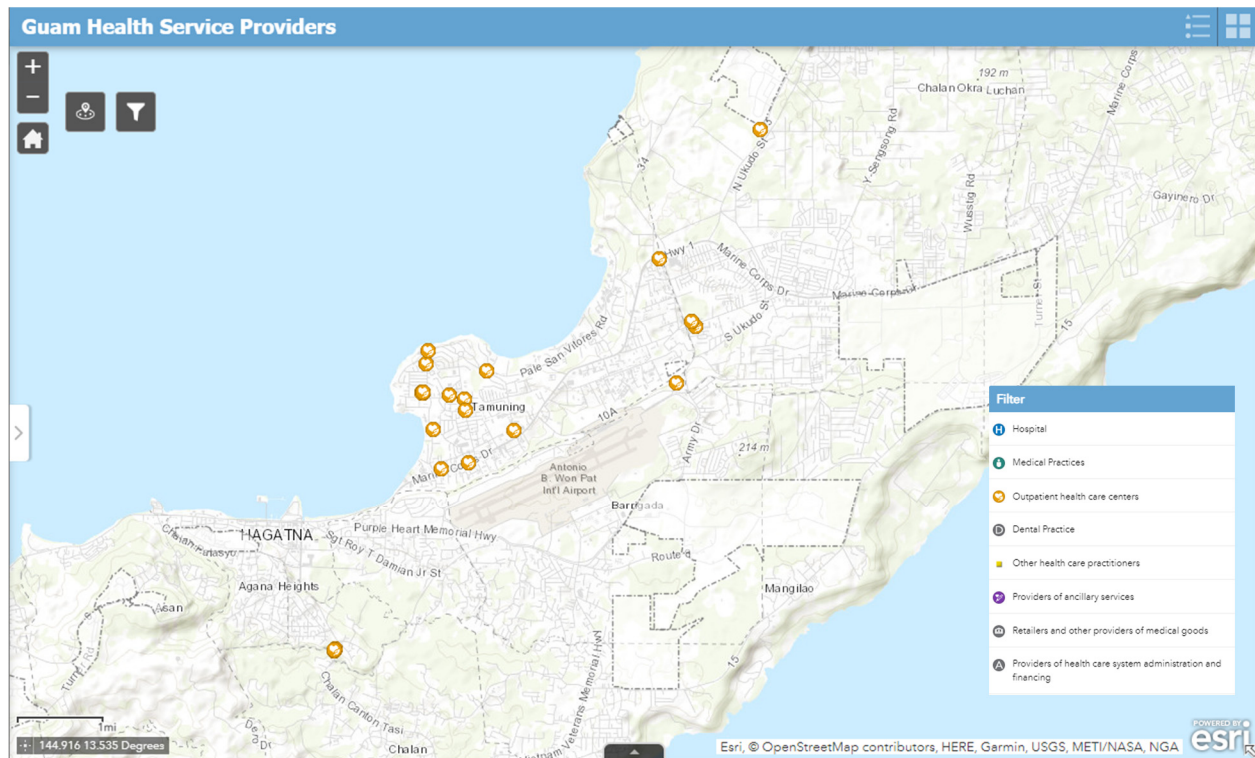
Location of Hospitals from Interactive GIS Database Tool



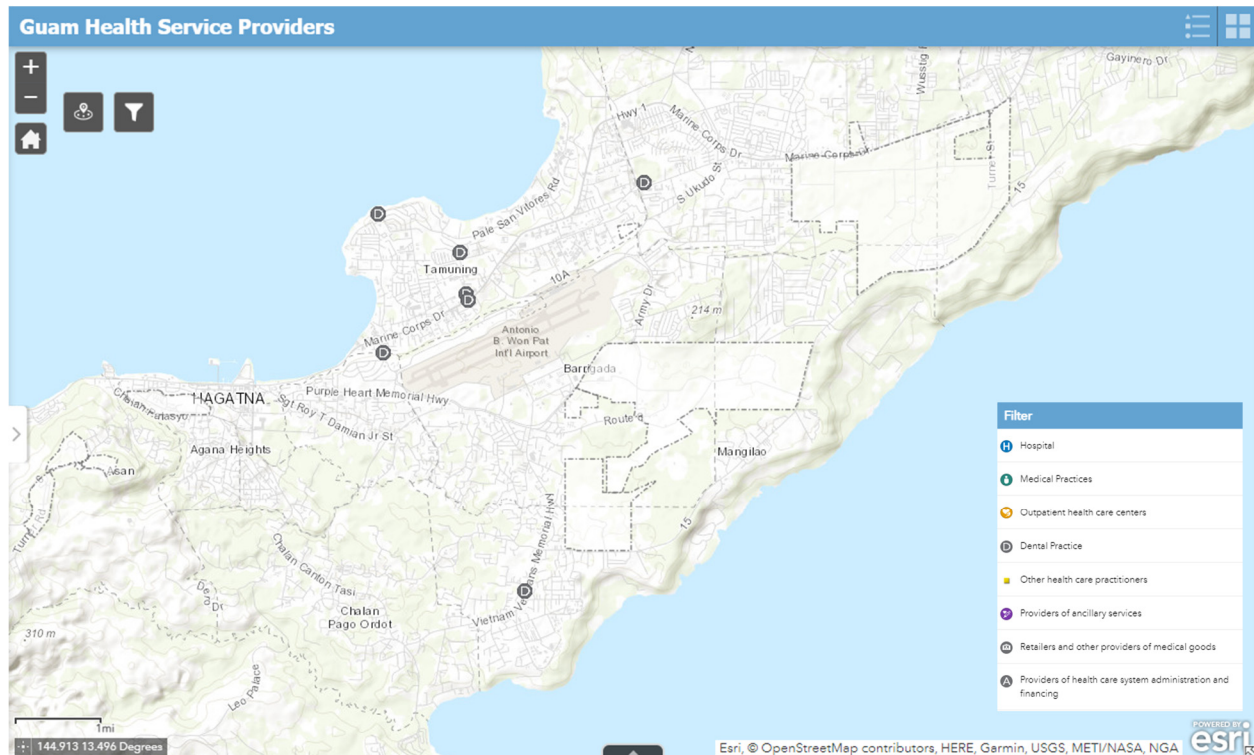
Location of Medical Practices from Interactive GIS Database Tool



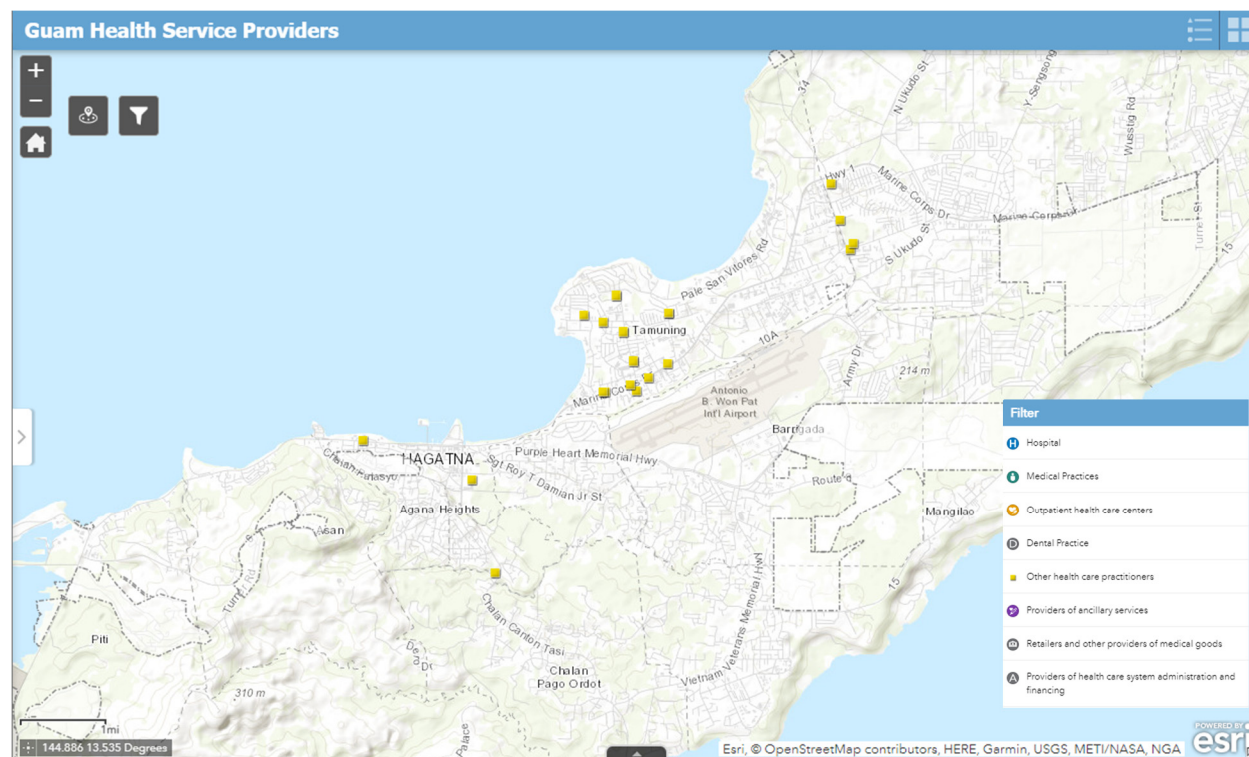
Location of Outpatient Health Care Centers from Interactive GIS Database Tool



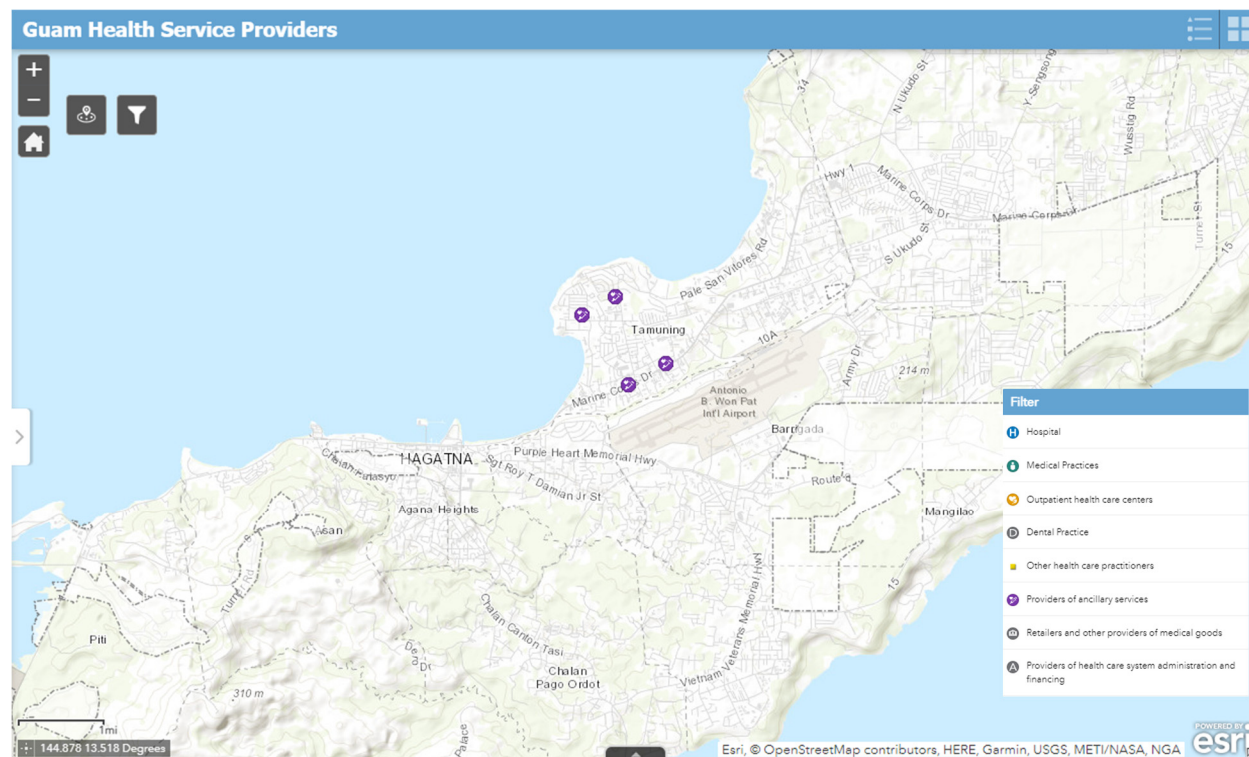
Location of Dental Practices from Interactive GIS Database Tool



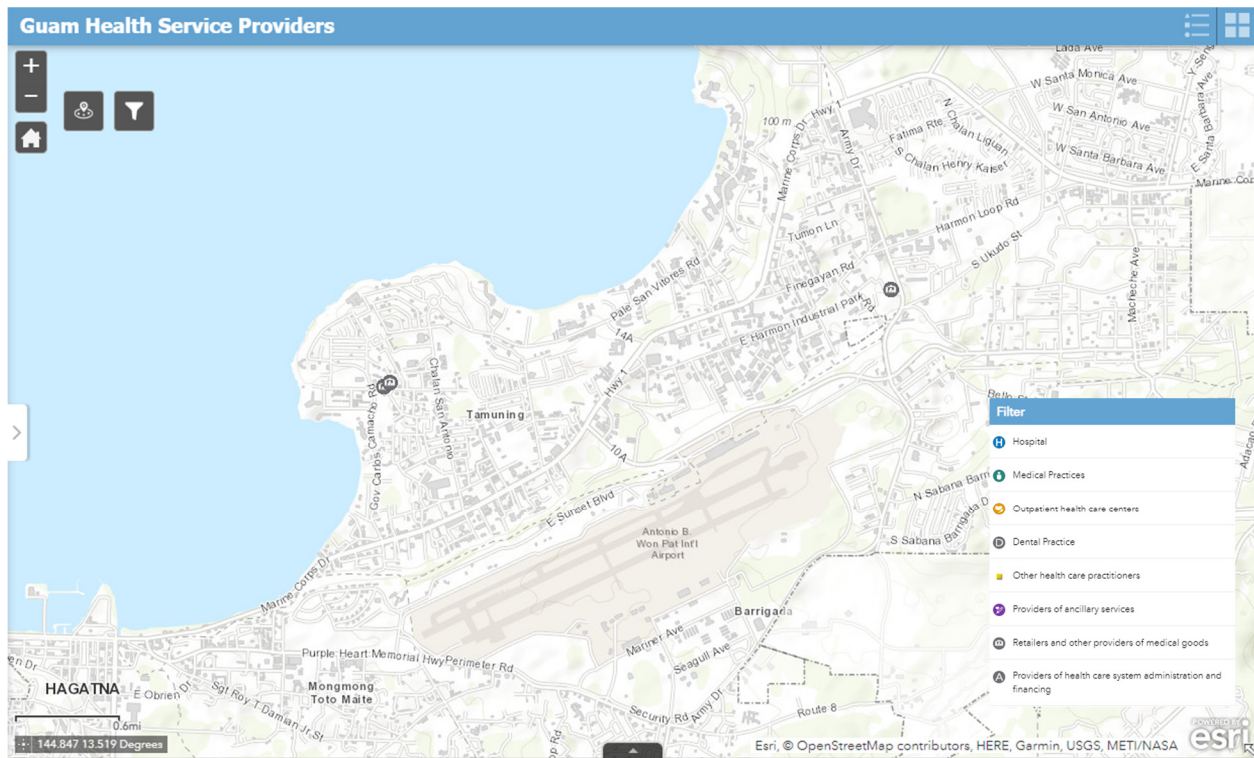
Location of Other Health Care Practitioners from Interactive GIS Database Tool



Location of Providers of Ancillary Services from Interactive GIS Database Tool



Location of Retailers and other providers of medical goods from Interactive GIS Database Tool



Location of Providers of health care system administration and financing from Interactive GIS Database Tool

