

**MINISTRY OF HEALTH
& HUMAN SERVICES**

QUAD REPORT

**FY 2018
FY 2019
FY 2020
FY 2021**



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List of Acronyms and Abbreviations

ADB	Asia Development Bank
ANC	Antenatal Care
ASN	Associate degree in nursing
ATT	Anti TB Treatment
BSN	Bachelor of Science in Nursing Degree
CDC	Centers for Disease Control and Prevention
CO	Clinical Officer
COFA	Compact of Free Association
CPR	Contraceptive Prevalence Rate
CS	Caesarean Section
CVDs	Cardiovascular Diseases
ELC	Epidemiology and Laboratory Capacity
FP	Family Planning
FY	Fiscal Year
GCCA+	Global Climate Change Alliance Plus Initiative
GRMI	Government of the Republic of Marshall Islands
HBP	High Blood Pressure
HRSA	Health Facility Readiness and Service Availability
HI	Health Islands Initiative
HIV	human immunodeficiency virus
HRSA	Health Resources and Services Administration
HTN	Hypertension
IAEA	International Atomic Energy Agency
KPIs	Key Performance Indicators
LTFU	Loss to follow up
MDA	Multi Drug Administration
MDT	Multi Drug Treatment
MIEPI	Marshall Islands Epidemiology and Prevention Initiatives
MMR	Measles Mumps Rubella
MSP	MOHHS Strategic Plan
NTD	Neglected Tropical Disease
NCDs	Non-communicable Diseases
NIs	Neighboring Islands
NSP	National Strategic Plan
OPD/IPD	Out-patient Department/ In-patient Department
ORS	Oral Rehydration Salts
PALS	Pediatric Advanced Life Support
PHC	Primary Health Care
PNC	Postnatal Care
PR	Press Release
RDT	Rapid Diagnostic Tests
RI	Respiratory Infections
SPC	The Pacific Community
STIs	Sexually Transmitted Infections

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SUPA	Scaling Up Pacific Adaptation
TB	Tuberculosis
WHO	World Health Organization
UN	United Nations
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development

A JOINT MESSAGE FROM THE MINSITER AND SECRETARY OF HEALTH

The Ministry of Health and Human Services (MOHHS) is tasked with safeguarding the well-being of individuals within the Republic of the Marshall Islands (RMI). This report provides a comprehensive overview of MOHHS operations during the fiscal years (FY) 2018 through to 2021, encompassing the transition from the previous strategic plan to the 10-year Strategic Plan for 2020-2030.


Similar to any organizational journey, MOHHS encountered both successes and challenges across various aspects of the health system. Notable milestones include the Mass Screening for Tuberculosis (TB) and Leprosy or Hansen's Disease (HD) in 2018. This initiative aimed to reduce the high rates of TB and HD while enhancing the capacity of the healthcare workforce and infrastructure. As a result of these initiatives, a notable number of new TB cases were identified, and there was a significant increase in the detection of new cases of non-communicable diseases (NCDs).

In early 2019, the islands faced a Dengue Fever outbreak, particularly in densely populated areas such as Majuro and Ebeye, as well as 13 surrounding atolls. Subsequently, climate change became a primary focus for MOHHS due to its associated health risks. An Emergency Declaration was issued, emphasizing the need to address health implications linked to climate change. This commitment led to the establishment of a Climate Change Team within MOHHS Majuro. The year concluded with a collaborative assessment of RMI Health Emergency and Preparedness, aligning with International Health Standards (IHR).

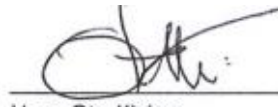
The latter part of 2019 was dominated by the COVID-19 pandemic, prompting RMI to declare a State of Health Emergency (SOE). This decision resulted in the closure of borders and closely monitored activities. The situation provided the RMI with the advantage of learning from other countries' experiences with COVID-19, allowing for a tailored approach with strategies feasible and contextually appropriate for its specific circumstances.

Efforts to combat COVID-19 gained increased support from international agencies, particularly in responding to surge capacity. A significant collaboration involved Government Authorities and the United States (U.S) Army Garrison Kwajalein Atoll (USAG-KA), setting up Quarantine Facilities for the repatriation of citizens and technical individuals. This collaboration evolved into a national priority, leading to the COVID-19 National Table-Top Exercise in August and a vaccination drive from December 2020 to the end of 2021.

In the face of the COVID-19 pandemic, normal operations of the Ministry persist, ensuring the provision of crucial treatment services to both main centers and the Neighboring Islands (NI). The dedication, care, and commitment of the staff have been commendable. Our commitment remains strong, and we will continue to enhance our services and processes to deliver high-quality healthcare to the people of RMI.



Francyne Wase-Jacklick
Secretary
Ministry of Health & Human Services



Hon. Ota Kisino
Minister
Ministry of Health & Human Services

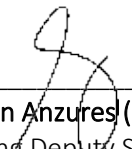
ACKNOWLEDGEMENTS

The process of producing the 2018 to 2021 Quad MOHHS Report was inclusive of all department's reports. This comprehensive report serves to inform the sectors and stakeholders about the performance and progress of the MOHHS key health indicators. It begins by highlighting the challenges and opportunities of the past four years within MOHHS.

The production of this report would not have been possible without the active and dedicated efforts of each of the Bureau departments and several teams. I extend my sincere gratitude to the partners who played a crucial role in supporting these activities.

I want to express my thanks to the respective Bureau departments and their leads for their monthly report contributions which were instrumental in making this report possible: Bureau of Primary Health Care Services (BPHCS), Bureau of Majuro Hospital Services (BMHS) Bureau of Nursing Services (BoN), Bureau of Kwajalein Atoll Healthcare Services (BKAHCS) Bureau of Oral Healthcare Services (BOH), Office of Administration, Procurement, and Financing (OAPF), Office of Health Planning, Policy, Preparedness, Personnel, and Epidemiology (OHPPPE), and Office of Medical Referral Services (OMRS).

Finally, I would also like to recognize and appreciate the programme officers at various levels who validated the contents of the report and contributed to its accomplishment.



Edlen Anzures (Ms.)
Acting Deputy Secretary of OHPPPE
Ministry of Health and Human Services

HIGHLIGHT

The past four years of 2018 through to 2021 had included challenges and opportunities for the RMI MOHHS. The staff of MOHHS have faced multiple outbreaks and public health concerns and have developed new plans to combat all these impacts whether emerging disease or climate change-related impacts on health. Therefore, laying the groundwork to further develop the RMI's healthcare infrastructure and health services capacity.

[TB and Leprosy Free Majuro - and Beyond](#)

The Tuberculosis (TB) and Leprosy or Hansen's Disease (HD) Free Majuro initiative began in the summer of 2018. The RMI's MOHHS partnered with the United States (US) Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), and dozens of local, national, and international agencies. This historic initiative aims to reduce the long-standing problem of high rates of TB and HD in the RMI while also strengthening the infrastructure for an array of health services and growing the healthcare workforce.

[Dengue Outbreak Response](#)

During the year 2019, RMI experienced the worst dengue-like illness (DLI) outbreak. This outbreak had the highest DLI recorded number of cases in the history of RMI. Ebeye Island had reported the first few DLI cases which spread throughout the 13 Neighboring Island (NI) atolls. The highest proportion of cases were recorded from Majuro atoll. From May 2019 to March 2021, there are total of 3,842 dengue cases with 1,236 hospitalizations, and 2 deaths.

[Addressing Climate Change and Health Head-on](#)

Following the emergency declaration in 2019 (1), Climate change became a National concern for RMI which therefore automatically became a top priority for MOHHS to address. MOHHS therefore took the initiative to address the short and long-term efforts. A major continuation was establishing a new department under OHPPPE which could facilitate and coordinate platforms for discussions for health threats due to climate change.

[RMI Joint Evaluation](#)

During 22nd to 26th September 2019, a team of Global Public Health Experts joined forces with MOHHS, RMI National authorities, and partners to

review and evaluate the RMI's health emergency preparedness through Joint External Evaluation (JEE) process. And this is one of the four components of the International Health Regulations (IHR) 2005 monitoring and evaluation framework, along with mandatory annual reporting, of after-action reviews (AARs), and simulation exercises.(2).

[Novel Coronavirus \(COVID-19\) Response](#)

Early March 2020, RMI declared a State of Health Emergency (SOE) for COVID-19. Borders were closed to its citizens and foreign nationals alike in the early stages. This allowed for high COVID-19 vaccination coverage rate and supplies of medication to treat those infected with COVID-19 for when there was community transmission.

[COVID-19 Vaccination Launching](#)

On December 29th, 2020, RMI did receive its first batch of COVID-19 vaccines from the US CDC. That same afternoon, the COVID-19 vaccine was officially launched for the RMI COVID-19 Vaccination Program at the Leroij Atama Zedkaia Memorial Hospital by Minister then Bruce Bilimon and members of Cabinet.

[COVID-19 National Tabletop Exercise – Majuro](#)

From August 12th to 14th, 2020, MOHHS joined the RMI National COVID-19 Tabletop Exercise (TTX). The 3-Day event was supported by the International Organization for Migration (IOM) and WHO in close collaboration with the National Disaster Management Office (NDMO) under the Office of the Chief Secretary (OCS). The event was attended by 296 participants and was opened by President David Kabua with dignitaries Nitijela Parliament members and Kwajalein Emergency Operations Center (KEOC) were in attendance.

[Cancer Program](#)

The Human papillomavirus (HPV) Vaccination Task Group was established and ready to implement the workplan for the prevention of cervical cancer and the continued after-hours cancer screening. There was a Quality-of-Life survey conducted for the Ebeye Cancer survivors' group. There was a HPV vaccination launch in Majuro schools. There was also a mini-Cancer summit and the launch of the Cancer Support Group in Ebeye.

[Maternal and Child Health Services](#)

In 2022, the Maternal and Child Health (MCH) received donated solar powered freezers from the Japan Government through the assistance of United Nations International Children’s Emergency Fund (UNICEF). There were 22 of the 24 solar powered freezers that were distributed to the Neighboring Islands (NI) during the COVID-19 vaccination coverage. The same year, MOHHS also received two boats donated from UNICEF and the Government of Japan to provide support to the Public Health teams for vaccination coverage COVID-19 and routine vaccinations. AS well as supply COVID-19 test kits, infection prevention and control (IPC) supplies and other services.

[Early Childhood Development Program](#)

The RMI Early Childhood Development (ECD) Project was launched on April 23rd, 2019, in partnership with the World Bank, the Ministry of Finance, Banking and Postal Services (MOFBS), and the Division of International Development and Assistance (DIDA). World Bank Pacific began the initiative to provide support to the future of the Republic of the Marshall Islands with a US\$13 million investment in early childhood development. This initiative is just one part of the Human Capital Project throughout the Pacific.

1. INTRODUCTION

THE PEOPLE AND ISLANDS OF THE RMI

The Republic of the Marshall Islands (RMI, Aeolon kein Ad) is home to approximately 42,418 residents (3) who inhabit 29 coral atolls and five major islands connected by 180,000 square miles (470,000 km²) of Pacific Ocean, as depicted in Figure 1(4,5). The Marshallese people (ri-Majel) have occupied these islands and seas for thousands of years and continue to constitute the majority of the RMI's population. As the RMI enters its 45th year as a sovereign state free from colonial rule, it faces significant challenges. Chief among these is 1) the ongoing pursuit of justice regarding the United States' testing of nuclear weapons from 1946-1958 and 2) concerted efforts to ensure a livable future for the Marshallese in the face of dire threats posed by global climate change.

Figure 1: Map of Republic of Marshall Islands

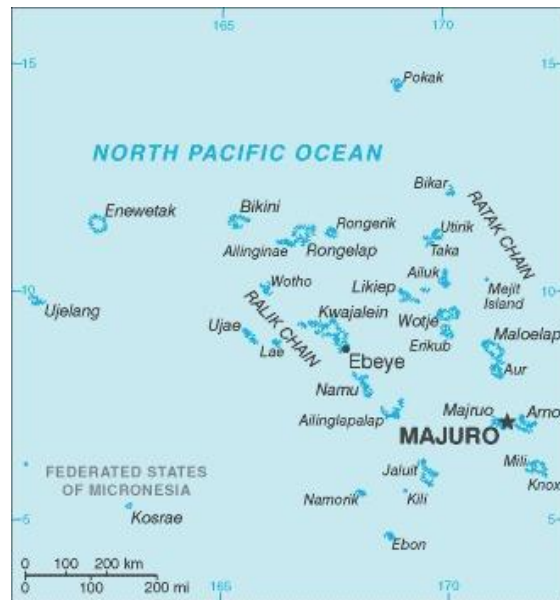
The RMI government maintains a collaborative relationship with the United States of America through the legal agreement known as the Compact of Free Association (COFA) and its subsequent amendments. This Compact represents a binding agreement between the US and RMI national governments, encompassing economic aid to the RMI and affording privileged visa status for Marshallese citizens, enabling them to travel, work, and reside in the US. In exchange, the US retains comprehensive military rights within the borders of the RMI.

Furthermore, the US operates multiple military facilities across Kwajalein atolls, governed by a distinct lease agreement with the islands' traditional landowners (Alap) and chiefs (Iroo). These close ties with the US also render the RMI eligible for US federal grants, such as those provided by the CDC, which contribute to supporting numerous public health programs in the RMI

DEMOGRAPHY OF THE RMI

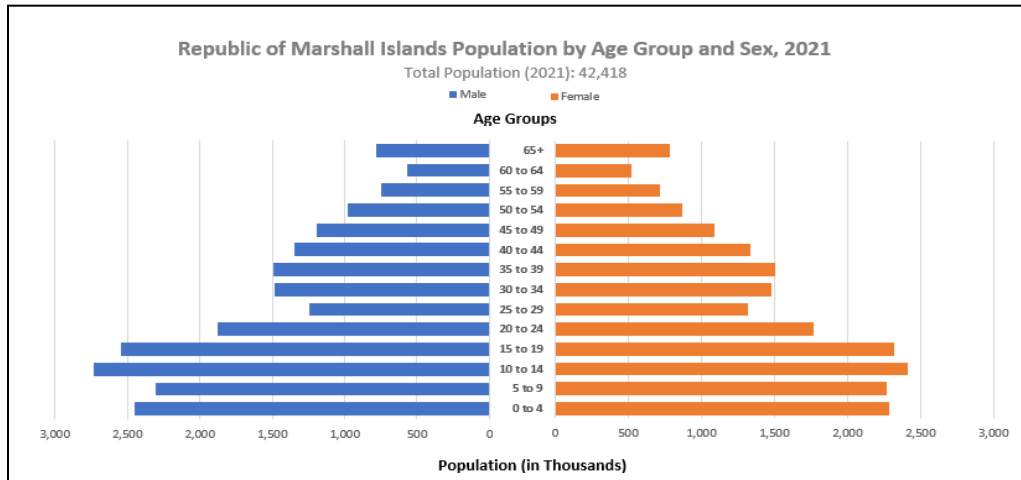
The current population of RMI is approximately 42,418 residents. As illustrated in Figure 2, the population pyramid, using the 2021 census data (3), depicts the distribution across various age groups, divided in the center between male and female members of the RMI population. The pyramid indicates a bottom-heavy structure, with a higher concentration of live births and the largest segment representing the younger dependents (0-14 years old), constituting about 62% of the population. This demographic profile signifies a YOUTHFUL population, with only 7% being over 65 years old.

The current RMI projection suggests that most of the Marshallese population live on Majuro atoll (the capital island and city) as compared to Ebeye island in Kwajalein atoll. Migration to and from the US is extremely common, as states like Hawai'i, Oregon, Washington, and Arkansas boast strong Marshallese communities.



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Figure 2: Population pyramid for the RMI using the 2021 census



2. MISSION AND VISION

VISION (Healthy Islands Vision)

RMI is a Place Where:

- Children are nurtured in body and mind
- Environments invite learning and leisure
- People work and age with dignity
- Ecological balance is a source of pride; and
- The ocean is protected to sustain our needs

MISSION

"To strengthen the commitment on health islands concept implementing health promotion to protect and promote healthy lifestyles to improve the lives of the people through primary health, and to build the capacity of Ministry of Health and Human Services, communities, families and partners to actively participate and coordinate preventive services programs, and activities as the core resources in primary health care services"

VALUES

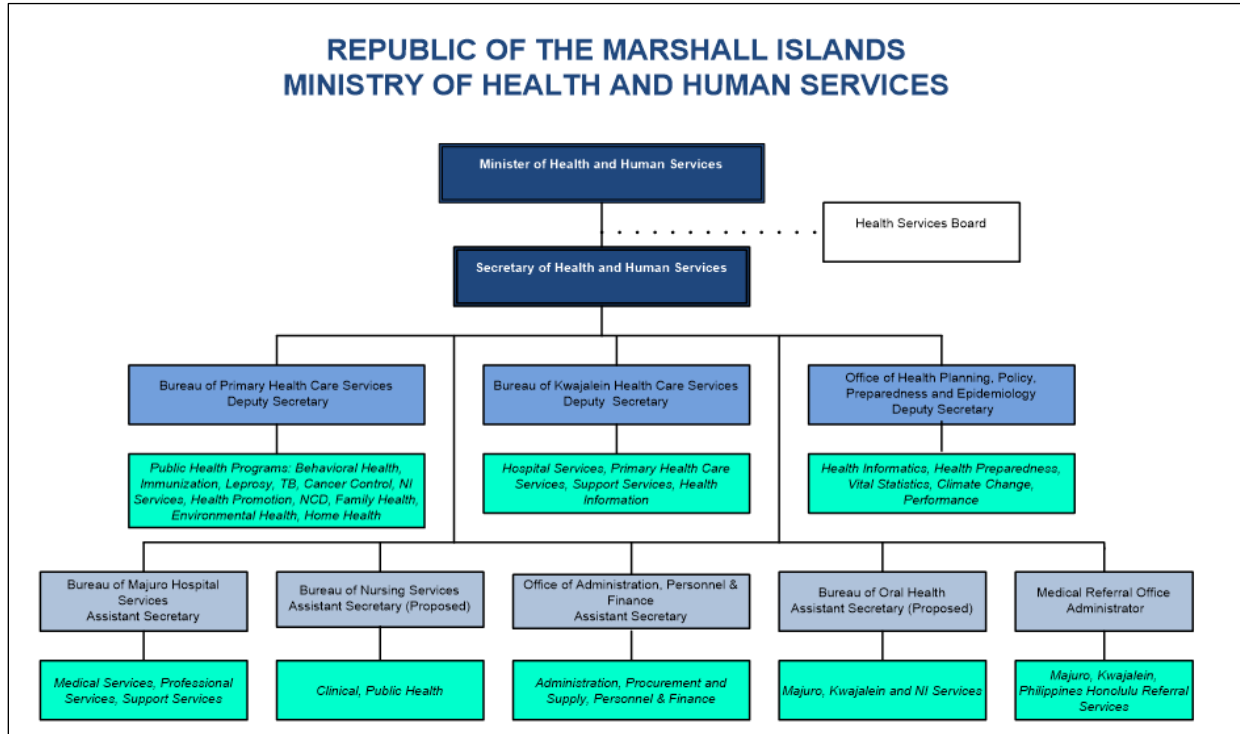
Duty, Respect, Integrity, Courage, Unity – "DR. ICU":

- Duty: Knowing your roles and responsibilities
- Respect: Courteous to everyone
- Integrity: Providing quality services with trust and confidence
- Courage: Standing up for what is right

3. ORGANIZATIONAL STRUCTURE

In Figure 3, is the overview of the ministry’s departments and key personnel, that is the organization chart with the respective Bureaus and their departments.

Figure 3: MOHHS Organization Chart, 2022



MOHHS History and Organization Philosophy

Figure 4: MOHHS Philosophy

Shortly after independence, the RMI government established the Bureau of Primary Health Care to care for the well-being of all people across the island nation. Today, the Ministry of Health and Human Services (MOHHS) continues the legacy of primary health care, as outlined in the 1978 Alma Ata Declaration.

To this end, the RMI’s MOHHS oversees the provision of health care services and data collection in line with international, regional, and national health development guidelines. These include the United Nations Sustainable Development Goals, the World Health Organization (WHO) Western Pacific Region’s Health Islands Initiative, and the recently released 2020-2030 RMI National Strategic Plan.

The MOHHS approaches health and wellbeing as a collective responsibility, exemplified through the principle of “kumiti ejmour”, a phrase in Marshallese (kajin majol) which translates to working together for better health. The “kumiti” lifestyle is one where everyone in the Marshall Islands supports one another by making every effort to improve health now and in the years to come. The MOHHS aims to ensure that every community across the RMI, from urban areas like Majuro and Ebeye to the smallest Neighboring Islands is meaningfully involved and included in the provision of health care services.

Kumiti Ejmour

The philosophy of Kumiti Ejmour comes from two base Marshallese words: *kumit* (to work together as a group) and *ājmour* (healthy, robust, and vigorous). Taken together, this philosophy embraces traditional Marshallese values around collective responsibility and mutual care to guide solutions to contemporary public health problems.

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RMI HEALTHCARE SYSTEM AND ORGANIZATION STRUCTURE

The MOHHS is divided into eight Bureaus and Offices:

1. Bureau of Majuro Hospital Services (BMHS)- Leroij Atama Zedkeia Medical Center
2. Bureau of Kwajalein Atoll Health Care Services (BKACHS)- Leroij Kitlang Memorial Health Center
3. Bureau of Nursing Services (BONS)
4. Bureau of Oral Health Services (BOHS)
5. Bureau of Primary Health Care Services (BPHCS)
6. Office of Medical Referral Services (OMRS)
7. Office of Administration, Procurement and Finance (OAPF)
8. Office of Health Planning, Policy, Preparedness, Personnel, and Epidemiology (OHPPPE)

Table 1: Healthcare Service Locations

MAJURO ATOLL		KWAJALEIN ATOLL	
<ul style="list-style-type: none"> Leroij Atama Zedkeia Medical Center (Majuro Hospital) Laura Health Center Rongrong Health Center Woja Health Center 		<ul style="list-style-type: none"> Leroij Kitlang Memorial Health Center (Ebeye Hospital) Santo Dispensary Ebadon Dispensary Gugeegue Dispensary 	

NEIGHBORING ISLANDS HEALTH CENTERS			
RATAK CHAIN		RALIK CHAIN	
1. Aerok	15. Lukonwor	1. Aerok	15. Mejrirok
2. Maleolap	16. Mejit	2. Ailinglaplap	16. Namdrik
3. Ailuk	17. Milli	3. Bwoj	17. Namu
4. Arno	18. Nallu	4. Ebon	18. Narmij
5. Aur	19. Ollet	5. Imiej	19. Toka
6. Bikarej	20. Tarawa	6. Imiroj	20. Ujae
7. Enejelar	21. Tinak	7. Jabnoden	21. Woja
8. Enejit	22. Tobal	8. Jabot	22. Wotho
9. Ine	23. Tokewa	9. Jabwor	
10. Jang	24. Tutu	10. Jaluit	
11. Jebal	25. Ulien	11. Lae	
12. Kaven	26. Wodmej	12. Lib	
13. Kilange	27. Wotje	13. Mae	
14. Likiep		14. Majkin	

Table 2: Bed Capacity of the two Main Hospitals in Majuro and Kwajalein Atoll

Hospital	Bed Capacity
Leroij Atama Zedkeia Medical Center (Majuro Hospital)	137
Leroij Kitlang Memorial Health Center (Ebeye Hospital)	54

4. PUBLIC HEALTH INITIATIVES

4.1 Bureau of Primary Health Care Services

The Deputy Secretary of Primary Health Care is responsible for formulating strategic public health policies and overseeing the implementation of public health programs as legislated under the Marshall Islands Public Health Welfare Act of 1966. There are 56 health centers in RMI.

Aside from the 177 health centers, health assistants (HAs) are the primary healthcare providers. Medical and public health staff conduct outreach to the health centers in the NIs and within the community.

On September 15, 2018, MOHHS organized a child health fair, offering free health screenings, immunizations, and dental services. The event also featured complimentary giveaways and live entertainment, transforming health awareness into a family-friendly and enjoyable activity.



Figure 5: MOHHS Child Health Fair

4.1.1 Immunization

The immunization services cover the vast population of the RMI. Each year, the target is to achieve a 90% coverage rate for each respective routine vaccine.

On November 18, 2019, MOHHS issued a reminder about the availability of free children's vaccinations, specifically the Measles, Mumps, and Rubella (MMR) shots. These vaccinations were offered at the Maternal Child Health (MCH) clinic at Majuro and Ebeye Hospital in response to the measles health emergency declared by American Samoa on November 14, 2019.

On September 4, 2020, the MOHHS Immunization Program staff underwent training on the WebIZ (Immunization Information System), enabling Public Health Nurses to utilize immunization information during outreach mobile visits.



Figure 6: MOHHS Immunization Program, WebIZ Information System Training



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On October 8, 2021, the Immunization Program and the MCH program conducted school visits, administering the Pfizer vaccine to protect against severe illness caused by COVID-19.

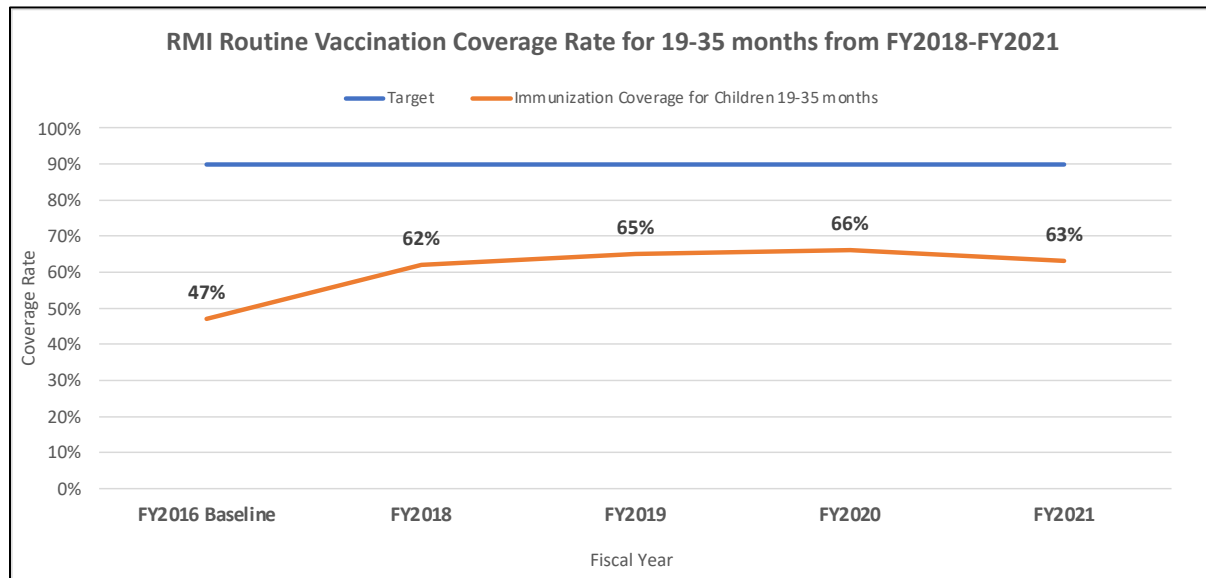
Figure 7: Immunization, and MCH program school visit



Table 3: Immunization Services on Majuro Atoll, Kwajalein Atoll, and the NIs

ATOLL/ LOCATION/ PROGRAM	IMMUNIZATION SERVICES
Majuro	<ul style="list-style-type: none"> Hospital services (labor and delivery room) Public health services (Well Baby Clinic, Postpartum Clinic, Walk-ins – MCH services)
Kwajalein (Ebeye)	<ul style="list-style-type: none"> Hospital services (labor and delivery room) Public health services (Well Baby Clinic, Postpartum Clinic, Chronic Disease Clinic, Prenatal Clinic, Walk-ins – MCH services)
Neighboring Islands	<ul style="list-style-type: none"> Mobile outreach visits – an atoll visited four times per year Fixed Centers – Jabor, Jaluit

Figure 8: RMI routine vaccination coverage rate for children 19 months to 35 months from fiscal year 2018 to 2021



A press release (PR) on December 21, 2020, was issued to notify and raise awareness that the RMI MOHHS would receive the COVID-19 vaccines around December 25, 2020. Subsequently, on December 29, 2020, the RMI received its first batch of COVID-19 vaccines from the US CDC. This shipment consisted of 1,200 doses of Moderna Vaccines, intended for administration to 600 individuals, with each person receiving the required dose of completion (at that time). Later that afternoon, the COVID-19 vaccine was officially launched as part of the RMI COVID-19 Vaccination Program at the Leroij Atama Zedkaia Memorial Hospital, with Minister Bruce Bilimon and members of the Cabinet in attendance.

4.1.1.1 Novel Coronavirus (COVID-19) Response

In the later months of 2019, particularly in December, the world witnessed the onset of the global COVID-19 pandemic. While the RMI is not exempt from the global threat posed by the virus, MOHHS and the national government have successfully prevented its spread within the borders of the RMI. As one of the few nations to accomplish this feat, the RMI's early success in preventing COVID-19 is likely to become a model case in cross-sector collaboration, public health communication, and large-scale vaccination.

The greatest public health achievement of the MOHHS over the past two years was preventing the spread of COVID-19 within the RMI. This was through the border closure (February 2020), strict quarantine protocols, and active COVID-19 vaccination campaigns.

As of September 29, 2021, zero cases of COVID-19 transmission were reported within the RMI, and a total of 1,919 individuals have been successfully repatriated from abroad.

- **Border Control and Travel Restrictions:**

RMI implemented strict border control measures, including border closure, local and international travel restrictions, and quarantine protocols for incoming travelers. This included the implementation of 2-week quarantine procedures before entering the country and at specific sites in-country. These measures were aimed at preventing the introduction and spread of COVID-19 within the country. The steadfast commitment to prioritizing health has kept life within the RMI relatively unaffected by the deadly disease, effectively managing and controlling the potential spread of COVID-19 within its borders.

- **State of Health Emergency:**

On February 07, 2020, a proclamation declaring a State of Health Emergency (SOHE) was signed by President David Kabua in response to the global pandemic, the 2019 Novel Coronavirus, also known as COVID-19. This proclamation temporarily restricts the entry of travelers and sea vessels originating from or transiting through Mainland China, Hong Kong, and Macau. Additionally, it suspends all Government of RMI international travel until further notice. This declaration empowered the government to enforce measures aimed at protecting public health and safety.

On July 16, 2020, the RMI Health Emergency Operations Center (HEOC) was activated to monitor the Dengue Outbreak, observe the Measles outbreak, and include monitoring of COVID-19. The purpose was to implement preparedness and response measures to minimize the risk of importation and potential community transmission of COVID-19.

- **Healthcare Capacity:**

Efforts were made to enhance healthcare capacity, including the availability of testing facilities, the establishment of quarantine and isolation facilities, and availability of medical supplies and equipment like HEPA filters, portable x-rays, PPEs, etc. Additionally, there was a surge in capacity recruitment in various areas, such as IPC specialists, epidemiologists, public health nurses, laboratory scientists, radiologists, clinical nurses, and anesthetists.

- **Public Health Measures:**

Public health measures such as social distancing, wearing masks, and hygiene practices were promoted to reduce the risk of transmission within the community. As well as training on IPC measures, donning and doffing of personal protective equipment (PPE's) to the healthcare workers

- **Vaccination Campaign:**

The RMI participated in global vaccination efforts. Vaccination campaigns were rolled out to vaccinate the population against COVID-19, with priority given to frontline workers and vulnerable populations.

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Figure 9: COVID-19 Vaccination Launch, Majuro, December 29, 2020

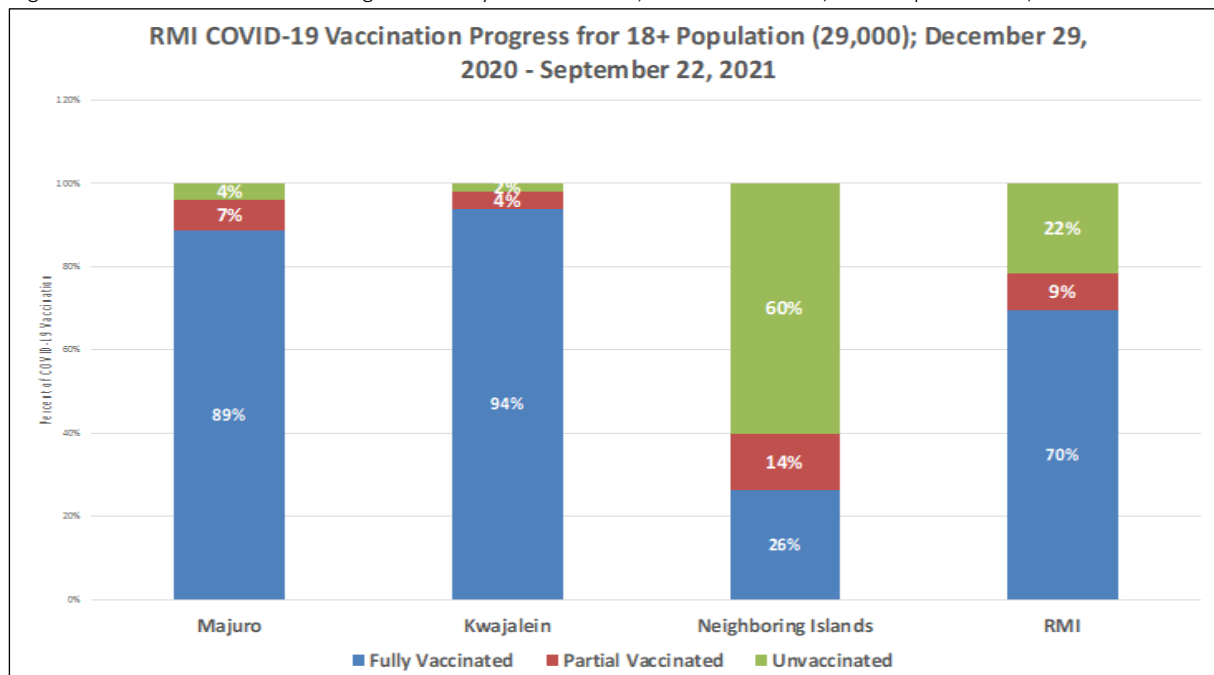


Vaccination against COVID-19 was well underway in both urban centers and NIs. The MOHHS remains committed to ensuring that the eligible population is vaccinated before concluding the current emergency precautions.

Vaccination efforts began on December 29th, 2020. The initial COVID-19 vaccines distributed by CDC from the U.S. during 2020 were the Pfizer-BioNTech and Moderna vaccines. Both vaccines received Emergency Use Authorization (EUA) from the U.S. Food and Drug Administration (FDA) in December 2020. These vaccines played a crucial role in the early phases of the vaccination campaign to combat the COVID-19 pandemic.

Vaccination rates among adults in the urban centers of Majuro (75%) and Kwajalein (83%) atolls are currently among the highest in the world, reflecting the success of the vaccination campaign in RMI.

Figure 10: COVID-19 Vaccination Progress for 18 years and above, RMI December 29, 2020-September 22, 2021



The COVID-19 vaccine incentive strategies included: mass vaccine events, house-to-house campaign, and vaccine lottery.

There were special MOHHS teams that travelled to the NIs to provide vaccines in April 2021. They had managed to reach 10 atolls/islands (Lib, Wotje, Jaluit, Kili, Namdrik, Mejit, Mejatto, Ailuk, Utrik, and Aur).

As of September 28, 2021, the overall COVID-19 vaccination completion rate (second doses) for individuals in RMI was 70%. In Majuro, Kwajalein, and the NIs, the respective completion rates were 89%, 94%, and 26%

Recognizing the importance of foreign crews on shipping vessels and the significance of the port of entry, a unique program was initiated to provide COVID-19 vaccinations at the Majuro seaport.

- **Multi-sectoral Approach**

Ensuring that the RMI remains COVID-19-free has necessitated close collaboration with the Office of the President, the Nitijela, traditional leaders, clan heads, the National Disaster Committee (NDC), and other government agencies, maintaining emergency orders for almost two years. Through these coordinated efforts between the RMI National Government, MOHHS, CDC, USAG-KA, and various international partners, the COVID-19 response in the Republic of the Marshall Islands has been a collaborative endeavor aimed at safeguarding public health and mitigating the impact of the pandemic.

- **Kwajalein Atoll Multi-Sectorial Collaborations**

Collaboration with the Office of the Chief Secretary during COVID-19 operation in Risk communication and multi-cluster collaborations. Technical Support to the Mayor's office in setting up an Incident Command Center and System for Kwajalein Local Government with its collaborative clusters. Support was also rendered to Kwajalein Disaster Committee and the Kwajalein Emergency Operations Center on the plans for the COVID-19 outbreak. Continuous collaboration with the Environmental Health Unit (EHU) in setting standards of practices in case investigation concerning environmental risk factors waste disposal and food borne illnesses. The Unit also provides advisory support to the EHU for food establishment assessment and water testing in Ebeye and in the Neighboring Islands. As member of the Health Cluster the Unit also support the Local Government with updates of Communicable Disease data that contributes to projects in mobilizing support for the Kwajalein Sustainability Laboratory to work in collaboration with the University of Hawaii and University of Washington.

- **International Collaboration:**

The RMI collaborated with international organizations, including receiving support from entities like the World Health Organization (WHO) and regional health agencies.

Through partnerships with aid-granting organizations and international health agencies, the MOHHS has leveraged the pandemic threat to enhance key aspects of the RMI's healthcare infrastructure. This includes improving preparedness against infectious outbreaks, constructing, and maintaining isolation wards in Majuro, strengthening local laboratory facilities, enhancing port and disease surveillance capacity, and expanding the available space for medical materials. These advancements will contribute to ensuring that the MOHHS can better serve the people of the RMI for many years to come.

There was overall support for COVID-19 response by the Asia Development Bank (ADB), Health Resources and Services Administration (HRSA), Australian Embassy, Centers for Disease Prevention and Control CDC (immunization, health disparity, the Epidemiology and Laboratory Capacity (ELC) Program, community health workers), Japan Government, New Zealand government, The Pacific Community (SPC)[Infection, Prevention and Control program], Taiwan Government, , United Nations Children's Fund (UNICEF), and the United States Agency for International Development (USAID).

4.1.2 Leprosy

Leprosy, classified as a neglected tropical disease (NTD), results from *Mycobacterium leprae* infection. The implementation of multi-Drug therapy (MDT) has significantly reduced registered prevalence, plummeting from over 5 million cases in the 1980s to 133,802 cases in 2021. Despite this decline, the persistence of new cases underscores ongoing infection transmission. Essential measures, such as screening contacts and

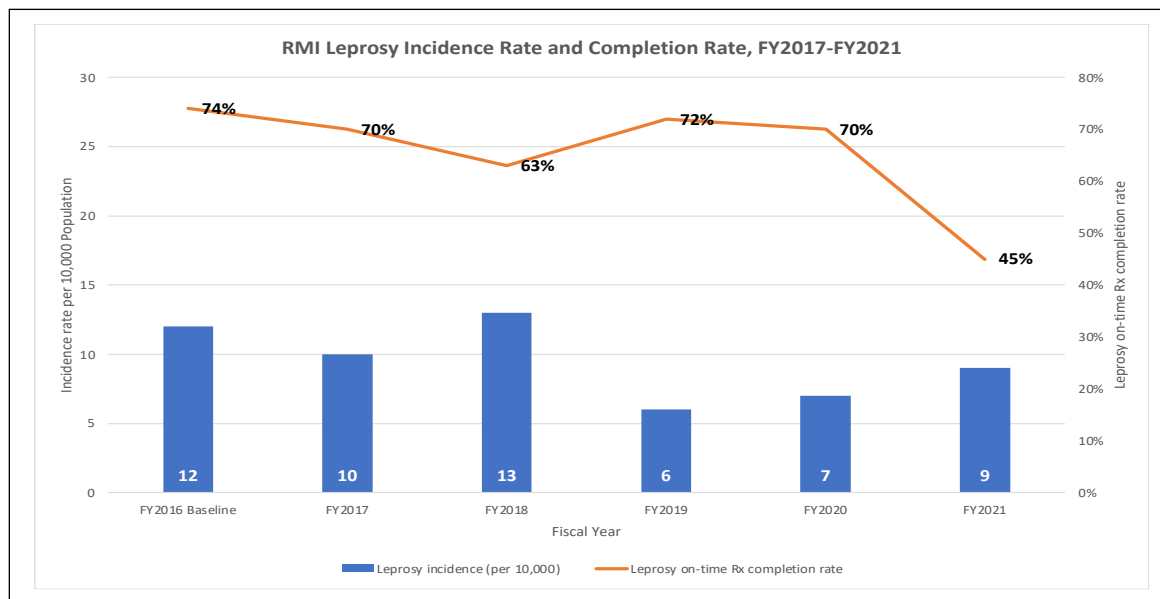
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administering single-dose rifampicin chemoprophylaxis, are recommended to effectively interrupt the transmission chain(3).

In 2019, additional nations and regions with elevated prevalence included RMI (6.85 per 10,000), the Federated States of Micronesia (FSM) (4.26 per 10,000), and Kiribati (2.69 per 10,000). Consequently, all these areas exhibited prevalence surpassing the elimination threshold of less than 1 per 10,000 as stated in a study published in the Western Pacific Surveillance and Response Journal⁽⁴⁾. Although the statement is on prevalence rate, and Figure 11, is on the incidence rate there is a decrease in completion rate by 2021 and there are still cases identified per 10,000 population from FY2017 through to FY2021.

This is one of the challenges for RMI to improve on the prevalence rates that were higher than the desired threshold for elimination, which is less than 1 case per 10,000 people. So, it indicates that the condition was more common than what is considered acceptable for elimination through the years.

Figure 11: RMI Leprosy Incidence Rate and Treatment Completion Rate, FY2017-FY2021



4.1.3 Tuberculosis

Majuro TB & Leprosy Free Project (Mass Screening)

Building on the successes of Tuberculosis (TB) and diabetes screening in Ebeye in 2016, the RMI's MOHHS partnered with the US Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), and dozens of local, national, and international agencies to continue the goal of testing every person in the RMI for tuberculosis (TB) and screening for leprosy or Hansen's Disease (HD). This historic initiative aims to reduce the long-standing problem of high rates of TB and HD in the RMI while also strengthening the infrastructure for an array of health services and growing the healthcare workforce.

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Figure 12: Launching of TB and Leprosy Free Project, Majuro June 11, 2018



TB and Leprosy Free Majuro officially began in June 2018. The 24-week mass screening project for active TB, latent TB, Hansen's disease (Leprosy) and diabetes was completed for the general population. As of November 12, 2018, our public health nursing teams tested and interviewed 22,402 persons for tuberculosis and leprosy, representing 82% of Majuro population of 27,275 per RMI 2011 Census. For those over age 15, 93% of the population-initiated screening, and 79% completed all screening activities. After the initial visit at home, 19,136 (85%) came to the screening sites to complete all screening steps.

Table 4: Summary Table of Preliminary Results of TB and Leprosy Free Project, Majuro June 12 - November 12, 2018

	Male					Female					Total	Percent
	0-4	5-14	15-34	35-49	50+	0-4	5-14	15-34	35-49	50+		
Screening process												
First screening (at home)	778	2,876	3,780	1,873	1,482	736	2,866	4,137	2,265	1,609	22,402	82% of population reached
Completed screening	600	2,551	3,092	1,595	1,268	571	2,556	3,545	1,972	1,386	19,136	85% completed second visit
Active TB												
Started Treatment	25	27	32	34	41	12	29	36	36	35	307	1,542 active TB diagnoses per 100,000 people screened
Latent TB (sleeping TB)												
Latent TB diagnosis	35	221	1,191	823	675	42	261	937	654	528	5,367	29% of people screened diagnosed with latent TB
Recommended for latent TB treatment	35	221	1,122	746	582	42	261	859	587	442	4,897	9% with latent TB were not medically eligible for latent TB treatment
Started latent TB treatment	9	232	1,068	723	538	13	260	863	571	428	4,705	96% of eligible patients started latent TB treatment
Leprosy												
Referred for evaluation	30	84	36	29	23	17	56	57	34	28	394	2.5% of people screened were referred for leprosy evaluation
New cases of leprosy	1	8	6	5	4	-	6	15	8	1	54	14% of referred patients were diagnosed with leprosy
Diabetes												
Identified with diabetes (A1c ≥ 6.5)	-	-	34	182	265	-	-	40	164	243	929	24% of people screened for diabetes have diabetes
New diagnosis of diabetes	-	-	25	106	92	-	-	33	78	75	409	11% of people screened for diabetes were newly diagnosed

As of July 16, 2020, 4,911 were recommended for Latent TB Infection (LTBI) treatment, The project identified 310 new and relapse cases of active TB, 4,911 of latent TB, and 54 new Leprosy cases were diagnosed. At its July 2020, 95% completed treatment for active disease, with an additional 88% completing prophylactic treatment for latent TB.

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Table 5: TB Mass Screening Summary, Majuro, 2018 - July 2020

Description	Number
Total TB Diagnoses (All Forms New & Relapse)	310
Treatment Complete	264
Cured	29
Died	1
Lost to Follow Up	11
Transfer Out	5
Treatment Success Rate	95%

Table 6: TB Mass Screening – LTBI Update, Majuro, 2018 - July 15, 2020

Description	Number/Percentage
No. of recommended LTBI	4,911
No. of LTBI that started LTBI treatment	4,911
No. and percentage of completed LTBI treatment	4,304 / 88%
No. of LTBI that stopped treatment due to AR	47
No. of LTBI refused treatment	47
No. of LTBI lost to follow up	513

The early success of the TB & Leprosy Free Majuro project was recognized by multiple awards from international TB controller agencies, including the 2019 National TB Controller's Association Meeting in Atlanta, GA. Plans are now in place to use the Majuro project as a model for addressing TB disparities in other Micronesian countries, including Chuuk state in the Federated States of Micronesia.

Figure 13: Photos taken from the TB and Leprosy Free Project, Majuro, June 11, 2018



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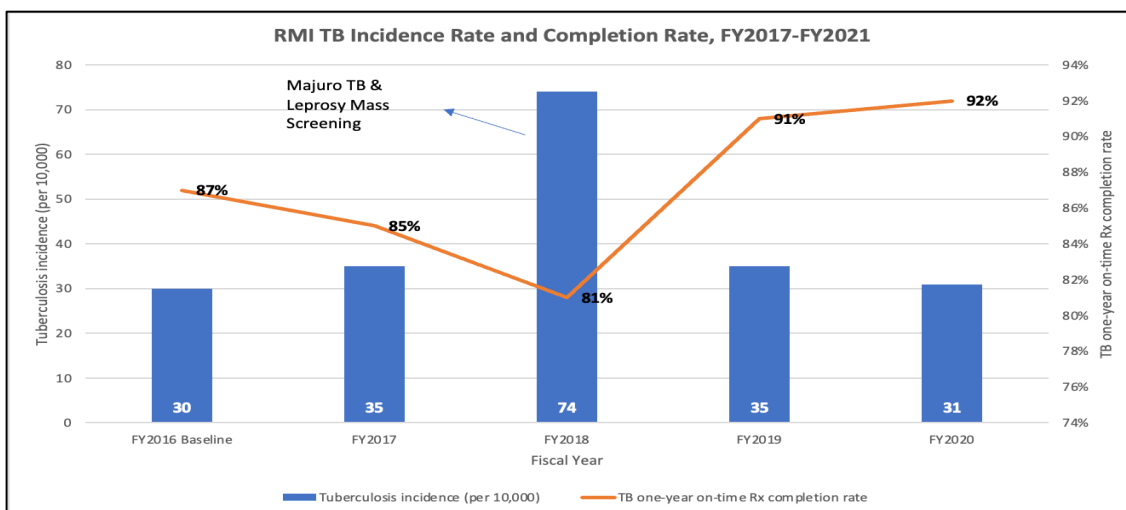
Now that the largest populations have been screened, the MOHHS is working towards screening every island and atoll throughout the RMI. So far MOHHS TB mobile teams have traveled to Arno to screen the populations and provide treatment. Jaluit and Wotje will be the next Atolls to conduct TB mass screening. Continuing this preventative initiative is further evidence of the MOHHS' goal of achieving health equity and justice throughout every atoll and island in the RMI.

Arno TB Mass Screening, 2020

There were 404 total screened in Arno and 340 or 84% screened with X-Ray and clinician evaluation while 64 (16%) need X-Ray and clinician evaluation. From 1/1/2020 to 7/29/2020, there were 34 active TB cases diagnosed which is 1,942 cases per 100,000 population. 20 of the 34 (59%) Active tb cases completed treatment. 137 (40% of the total screened) were diagnosed with LTBI. 80% of the LTBI successfully completed treatment. Planned to complete screening on August-September 2020. Active case finding was delayed due to the Dengue Outbreak and COVID-19 preparations.

The TB Program within MOHHS has been actively addressing the challenges posed by TB, which remains endemic in the RMI from 2018 to 2021. Despite concerted efforts, TB cases persist, and the program has been working relentlessly to provide accessible and effective diagnosis, treatment, and prevention measures.

Figure 14: TB Incidence and Treatment Completion Rate, RMI, FY2017-FY2021



Robust surveillance systems have been in place to identify and monitor TB cases promptly. Additionally, the program has been focusing on public awareness campaigns, education, and community engagement to reduce the stigma associated with TB and promote early detection.

Ongoing collaboration with international partners and stakeholders underscores the commitment to combating TB and improving the overall health outcomes for the population of the RMI.

4.1.4 Sexual Transmitted Infection / Human Immunodeficiency Virus

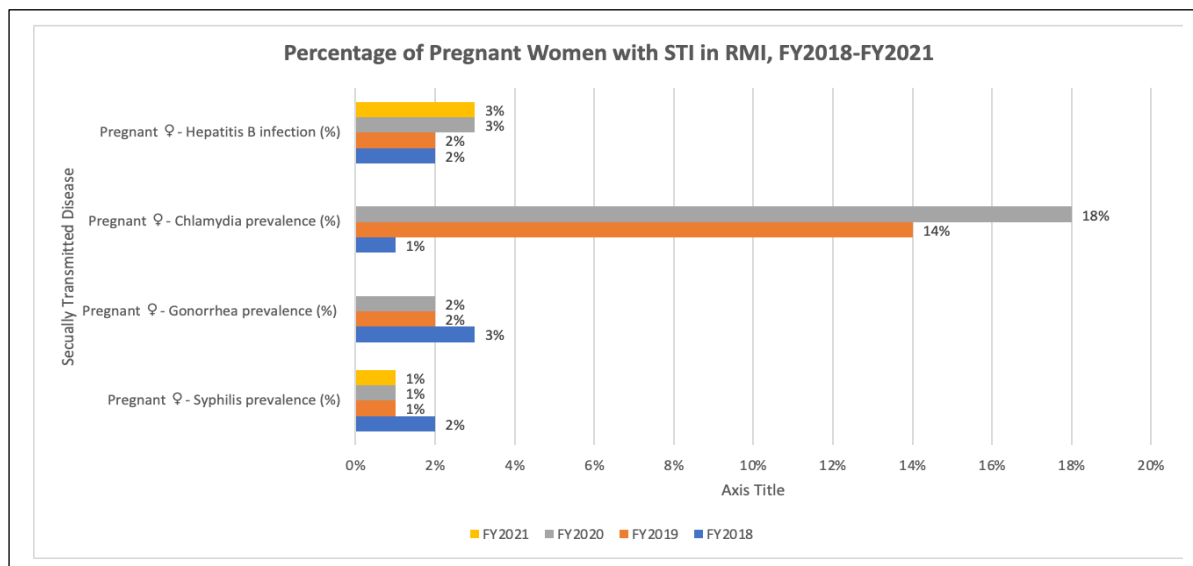
The Sexually Transmitted Infections (STI) and Human Immunodeficiency Virus (HIV) Program within MOHHS has been dedicated to addressing the challenges posed by STIs and HIV in the RMI from 2018 to 2021.

The program has implemented comprehensive prevention, testing, and treatment strategies to curb the incidence of STIs, including HIV. Efforts have been directed towards increasing public awareness, education, and outreach initiatives to promote safe sexual practices and reduce the spread of infections. Accessible and confidential testing services have played a crucial role in early detection and timely intervention.

Ongoing collaborations with international health organizations and community stakeholders have strengthened the overall response to STIs and HIV, contributing to improved health outcomes and the well-being of the population in the RMI.

For the past 5 years, there have been no new cases of HIV/AIDS diagnosed in RMI. As of FY2021, we have 8 cases of HIV who are monitored by the program.

Figure 15: Percentage of Pregnant Women with STI in RMI, FY2018-FY2021



4.1.5 Disease Prevention and Control – Non-Communicable Disease

The program directors and healthcare workers diligently continue their efforts to reduce rates of NCDs, facilitate the transportation of challenging cases across islands and countries, and ensure healthcare services at the two national hospitals (Majuro and Ebeye) and health clinics on the Nis. To achieve these objectives and more, MOHHS adopts a multi-sectoral approach, collaborating with various RMI government agencies, numerous international groups, non-governmental organizations (NGOs), local and traditional

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leaders, and volunteers worldwide. The following outlines some notable highlights of challenges and successes from FY2018 through to FY 2021.

The health promotion program also leans to motivate individuals to accept behavioral change by directly influencing beliefs, values, and attitudes.

On April 20, 2018, the Community Lifestyle Program (CLP) partnered with Majuro MOHHS at the MalGov City Hall to provide NCD check-ups as well as influenza shots.

Figure 16: CLP with MOHHS during NCD community outreach

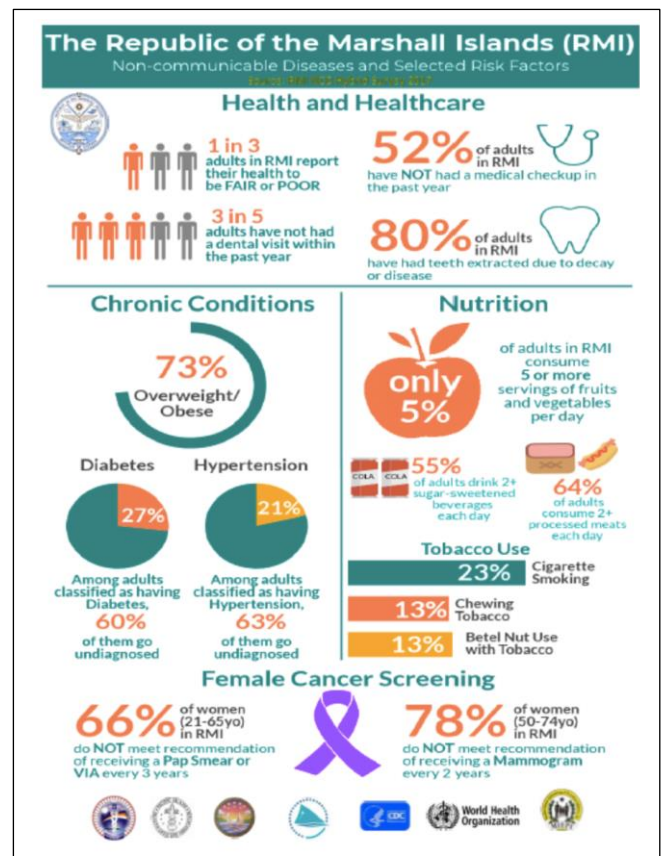


Hybrid NCD Survey Workshop conducted in Majuro at the International Convention Centre (ICC).

This was an important event as MOHHS recognized a considerable increase of NCD's (diabetes, cancer, heart disease, and stroke) within RMI.

Figure 17: NCD Lifestyle change with Marshallese soup (local cuisine)

On March 16, 2019, the NCD grant under MOHHS funded the production of an awareness video (found under RMI MOHHS Facebook page dated March 16, 2019) showcasing the preparation of NCD-friendly Marshallese cuisine. This initiative exemplifies MOHHS's dedication to raising awareness about behavioral changes in lifestyle and promoting healthy food consumption.



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Figure 18: NCD Lifestyle change with Marshallese soup (local cuisine)

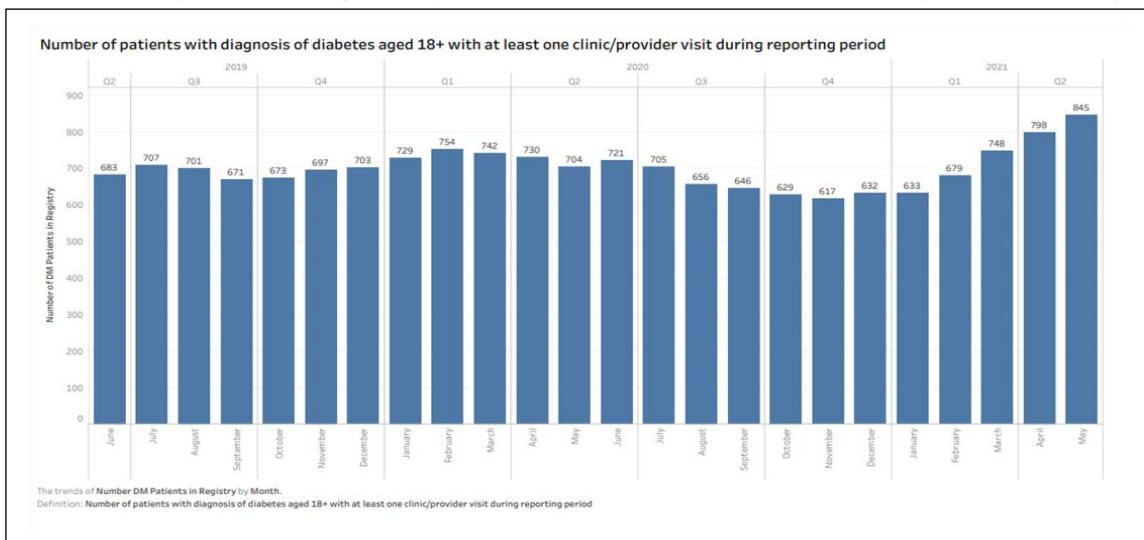


On November 23, 2020, MOHHS organized a walkathon in observance of World Diabetes Month. Additionally, booths were set up for glucose screening tests, COVID-19 awareness, and a family planning booth.

Figure 19: World Diabetes Month- Walkathon, November 2020, MOHHS

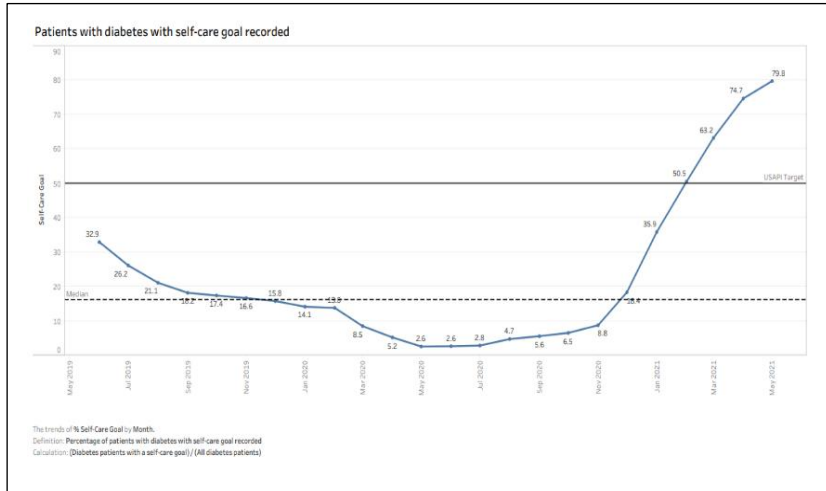


Figure 20: Number of patients with diagnosis 18 years and above with at least once clinical visit, Majuro, June 2019-May 2021



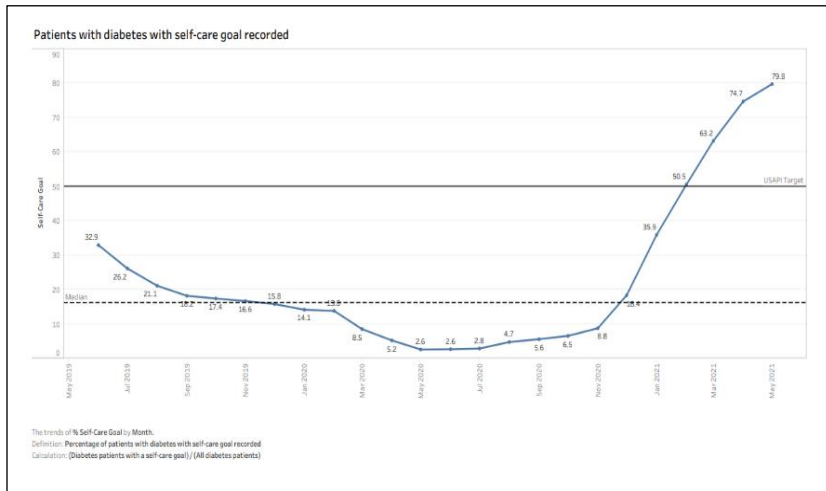
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Figure 21: Number of patients with diabetes with self-care goal, Majuro, June 2019-May 2021



In 2021, the Majuro registered diabetic patients met the goal of 50% with recorded self-care goal will enhance overall management and well-being. Self-care goals in diabetes management include objectives related to lifestyle changes, medication adherence, blood glucose monitoring, exercise, and dietary habits.

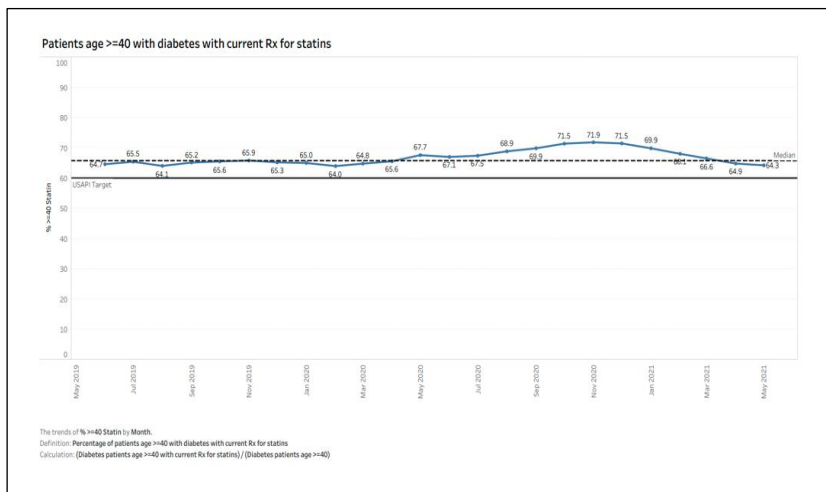
Figure 22: Average of most recent A1c value for patients with diabetes (percentage with A1c), Majuro, June 2019-May 2021



Based on the data from June 2019 to May 2021, the average of A1c value for Majuro Diabetic patients that visited the clinic with A1c test (hemoglobin A1c, is a blood test that provides an average of a person's blood sugar levels over the past 2-3 months) is more than the goal or target of 8%. The average A1c level among the registered diabetic patients is

higher than the desirable goal. A level above 9.0% is considered high and may indicate poor blood sugar control, which can lead to complications later.

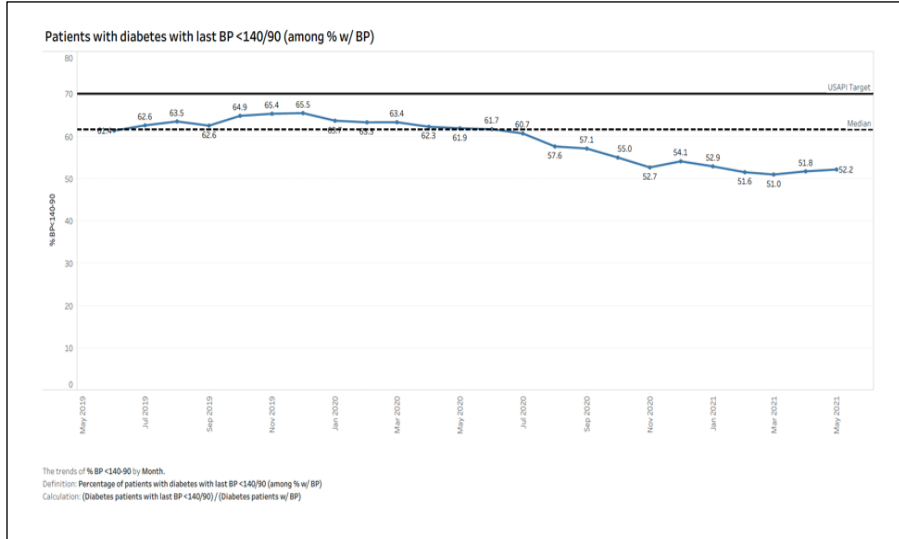
Figure 23: Registered Diabetic Patients 40 years and over with statins treatment, Majuro, June 2019-May 2021



The prescription of Statins for registered diabetic patients greater than or equal to 40 years old met the USAPI target of 60%. Statin. Patients that receive and follow the prescription of statin will reduce their cardiovascular risk like heart attack and strokes.

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Figure 24: Percentage of Registered Diabetic Patients with last Blood Pressure (BP) less than 140/90, Majuro, June 2019-May 2021



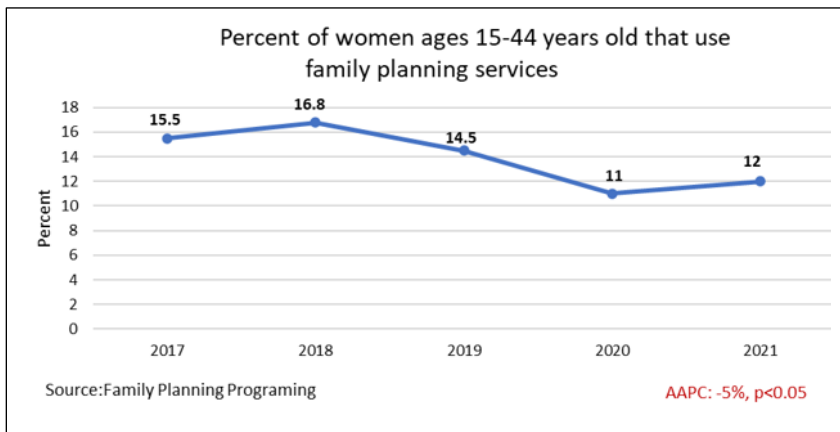
Registered diabetic patients didn't meet the target of 70% with last blood pressure of less than 140/90 mmHg. Blood pressure of 140/90 mmHg or higher is generally considered elevated and may indicate hypertension. Elevated blood pressure is a risk factor for various cardiovascular conditions. Monitoring and managing blood pressure within the

recommended range contributes to overall cardiovascular health and reduces the risk of associated complications.

4.1.6 Reproductive Health

In the past years, our dedicated efforts in maternal and child health have contributed to the well-being of mothers and children across our communities. Through comprehensive programs, we have aimed to enhance maternal care, promote safe deliveries, and provide essential health services for newborns and young children. Our commitment to improving maternal and child health outcomes remains steadfast, reflecting our ongoing dedication to the health and prosperity of future generations.

Figure 25: The percentage of Women in RMI (15-44 years of age) that utilize family planning services, 2019 – 2021



In women aged 15 to 44 years of age, the utilization of family planning services significantly dropped by 5%, decreasing from 15.5% in 2017 to 12% in 2021.

Table 7: Family Planning Services for Female Users by age in years, RMI 2018-2021

RMI Family Planning Services for Female Users, 2018										
Primary Method	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	>44	Total
Female Sterilization	0	0	0	5	34	120	252	183	106	700
Hormonal Implant	7	28	45	121	87	77	37	21	4	427

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3-Month hormonal injection	3	19	38	106	67	76	47	33	12	401
Oral Contraceptive	0	6	28	48	32	36	33	20	10	213
Female Condom	1	0	0	0	0	0	1	0	1	3
Fertility Awareness Method (FAM)	0	0	0	0	0	0	0	0	0	0
Intrauterine Device (IUD)	0	0	0	0	0	1	1	0	0	2
Abstinence	0	1	0	0	0	0	0	0	0	1
Withdrawal or other method	0	0	1	2	1	1	1	0	0	6
Total Female with Method	11	54	112	282	221	311	372	257	133	1753
No Method										
Pregnancy or Seeking Pregnancy	4	30	90	243	185	157	83	18	1	811
Other Reason	0	2	16	34	52	43	27	19	21	214
Total Female with No Method	4	32	106	277	237	200	110	37	22	1025
Rely on Male Method										
Vasectomy	0	0	0	0	0	0	0	0	0	0
Male Condom	1	0	1	0	1	0	1	0	2	6
Total Female that Relies on Male Method	1	0	1	0	1	0	1	0	2	6
Unknown/Not Reported										
Method unknown/not reported	0	0	0	0	0	0	0	0	0	0
Total Female Users of Family Planning Clinics	16	86	219	559	459	511	483	294	157	2,784

RMI Family Planning Services for Female Users, 2020										
Primary Method	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	>44	Total
Female Sterilization	0	0	0	7	17	30	29	10	2	95
Hormonal Implant	8	53	46	126	86	78	46	20	4	467
3-Month hormonal injection	3	41	65	171	167	107	50	24	16	644
Oral Contraceptive	1	6	12	41	33	25	25	14	4	161
Female Condom	0	0	0	0	1	1	0	0	0	2
Fertility Awareness Method (FAM)	0	1	1	0	1	0	0	0	0	3
Intrauterine Device (IUD)	0	0	0	1	0	0	1	0	0	2
Abstinence	0	1	1	0	1	0	0	0	0	3
Withdrawal or other method	0	0	0	0	0	0	0	0	0	0
Total Female with Method	12	102	125	346	306	241	151	68	26	1,377
No Method										
Pregnancy or Seeking Pregnancy	2	22	64	143	119	77	66	8	5	506
Other Reason	0	1	0	4	4	15	13	0	0	37
Total Female with No Method	2	23	64	147	123	92	79	8	5	543
Rely on Male Method										
Vasectomy	0	0	0	0	0	0	0	0	0	0
Male Condom	0	0	0	0	1	0	0	1	0	2

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Total Female that Relies on Male Method	0	0	0	0	1	0	0	1	0	2
Unknown/Not Reported										
Method unknown/not reported	1	6	18	62	44	35	22	9	12	209
Total Female Users of Family Planning Clinics	15	131	207	555	474	368	252	86	43	2131

RMI Family Planning Services for Female Users, 2021										
Primary Method	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	>44	Total
Female Sterilization	0	0	0	0	16	29	22	12	0	79
Hormonal Implant	6	48	59	151	84	73	51	25	11	508
3-Month hormonal injection	5	25	48	148	133	80	62	41	23	565
Oral Contraceptive	1	17	26	65	55	27	39	17	19	266
Female Condom	0	0	0	0	0	0	0	0	0	0
Fertility Awareness Method (FAM)	0	0	0	0	1	0	0	0	1	2
Intrauterine Device (IUD)	0	0	0	1	0	0	1	0	0	2
Abstinence	0	6	7	16	11	8	3	0	0	51
Withdrawal or other method	0	0	1	2	0	0	0	0	0	3
Total Female with Method	12	96	141	383	300	217	178	95	54	1,476
No Method										
Pregnancy or Seeking Pregnancy	3	8	19	79	63	36	26	12	7	253
Other Reason	0	0	1	0	1	0	0	1	2	5
Total Female with No Method	3	8	20	79	64	36	26	13	9	258
Rely on Male Method										
Vasectomy	0	0	0	0	0	0	0	0	0	0
Male Condom	1	0	0	0	1	0	0	1	0	3
Total Female that Relies on Male Method	1	0	0	0	1	0	0	1	0	3
Unknown/Not Reported										
Method unknown/not reported	1	6	18	62	44	35	22	9	12	209
Total Female Users of Family Planning Clinics	16	113	174	520	421	295	229	122	78	1,968

The percentage of live births among pregnant women who got prenatal care in the first trimester improved significantly by 8%, from 31.1% in 2019 to 36.4% in 2021.

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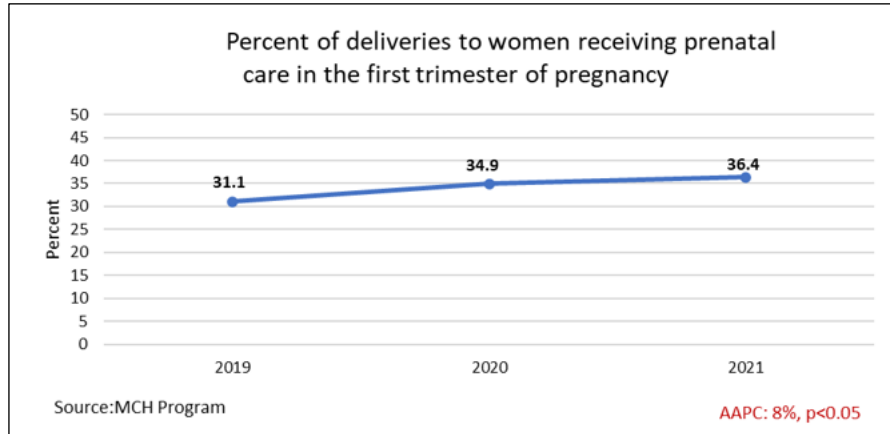


Figure 26: The percentage of prenatal care during the first trimester of women delivered, 2019 – 2021

immunized children of 19-35 months old, 2017-2021

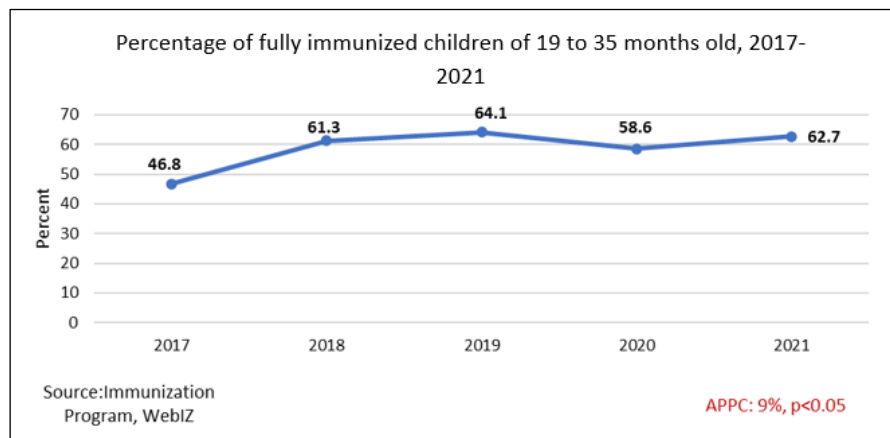


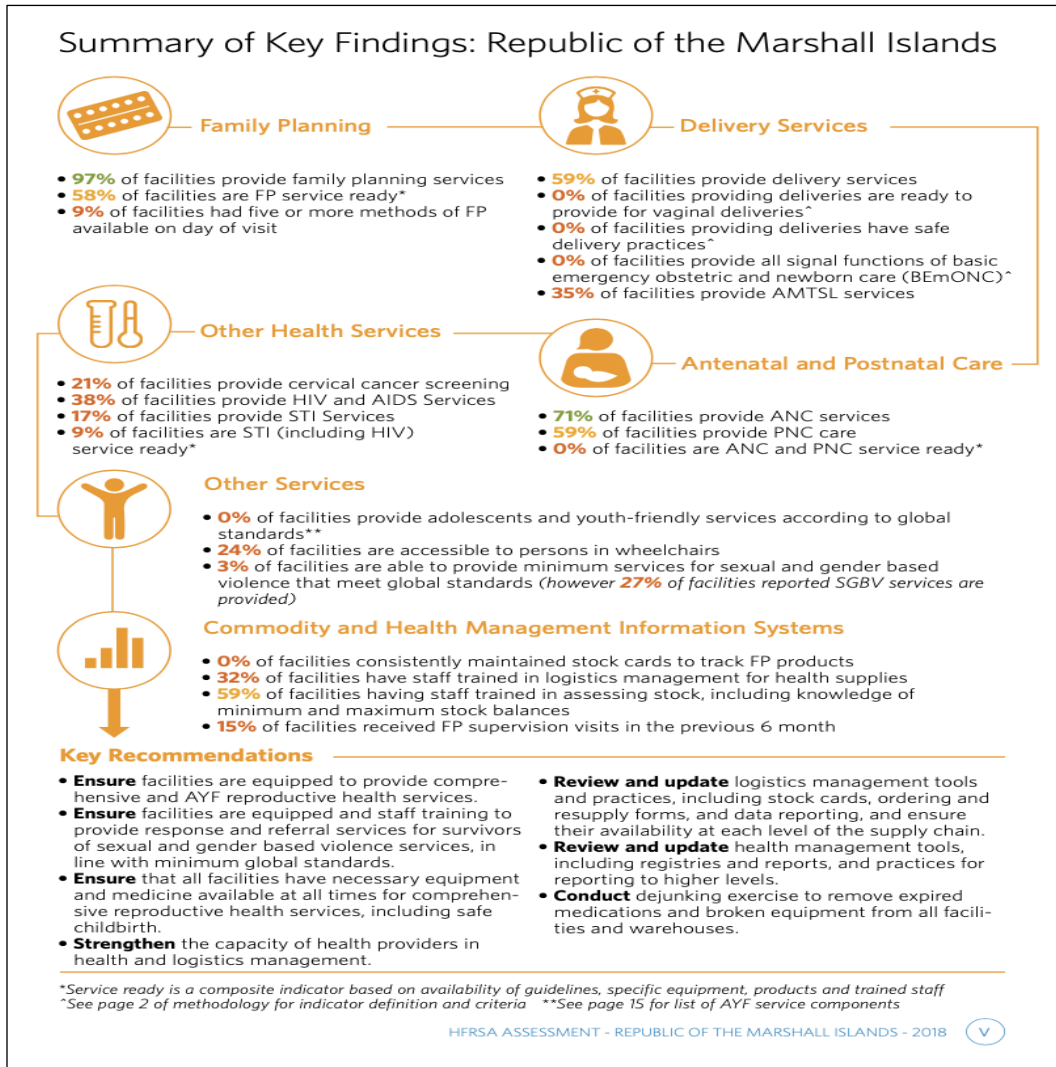
Figure 27: The percentage of fully

Children aged 19 to 35 months who were fully immunized increased significantly between 2017 and 2021, from 46.8% to 62.7%.

Figure 28: Health Facility Readiness Assessment Validation Meeting, RMI, July 23, 2019



Figure 29: RMI Health Facility Readiness and Service Availability (HFRSA) Summary Key Findings



4.1.7 National Comprehensive Cancer Control Program (NCCCP)

Over the years spanning from 2018 to 2021, the Cancer Program within MOHHS has been steadfast in its commitment to addressing the challenges posed by cancer in the RMI. This period has seen the program intensify its efforts in cancer prevention, early detection, and comprehensive care.

Implementing various awareness campaigns, the Cancer Program aimed to educate the public on preventive measures, lifestyle choices, and the importance of regular screenings. The collaboration with healthcare professionals and the community has been instrumental in fostering a holistic approach to cancer care.

Despite the inherent complexities associated with cancer management, the program has made strides in enhancing diagnostic capabilities and treatment options, ensuring that individuals affected by cancer receive the best possible care. The dedication of the Cancer Program reflects MOHHS broader commitment to improving health outcomes and addressing the specific health challenges posed by cancer within the Marshallese population.

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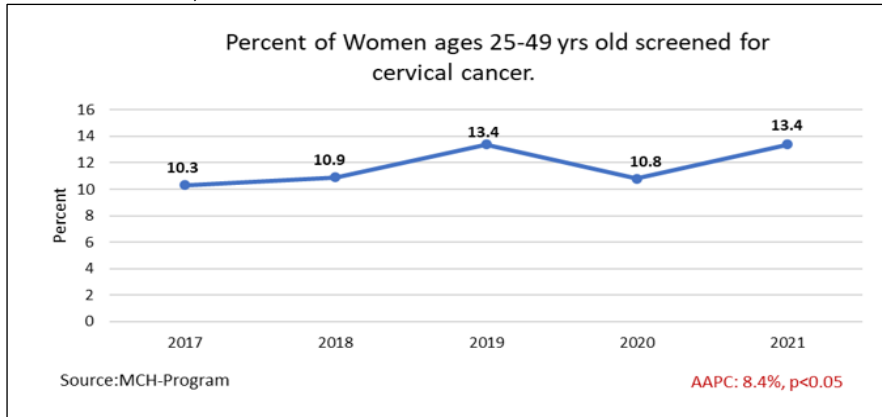
Table 8, provides a comprehensive analysis of cancer cases that has been conducted, shedding light on the prevalence, trends, and mortality rates. It includes the number of new cancer patients, incidence rates, deaths related to cancer, mortality rates, and the total number of old and new cancer patients. The figures highlight the fluctuating trends in cancer incidence, mortality, and prevalence rates over the specified fiscal years. Efforts to address and mitigate the impact of cancer on the population are crucial, emphasizing the need for comprehensive strategies in cancer prevention, treatment, and ongoing surveillance.

Table 8: Summary of Cancer Cases, FY 2017-FY2021

	FY2017	FY2018	FY2019	FY2020	FY2021
No. of New Cancer Patients	69	50	55	52	63
Incidence Rate Per 10,000 Population	13	9	10	9	15
No. of death related to cancer, all ages	33	31	35	36	35
No. of Old and New Cancer Patients	603	622	642	658	686
Prevalence Rate Per 10,000	111	114	117	120	164

Source: RMI Cancer Program, Rate is per 10,000 population

Figure 30: The percentage of Women in RMI (25-49 years of age) screened for cervical cancer, 2017 – 2021; Source: MCH Jurisdictional Survey

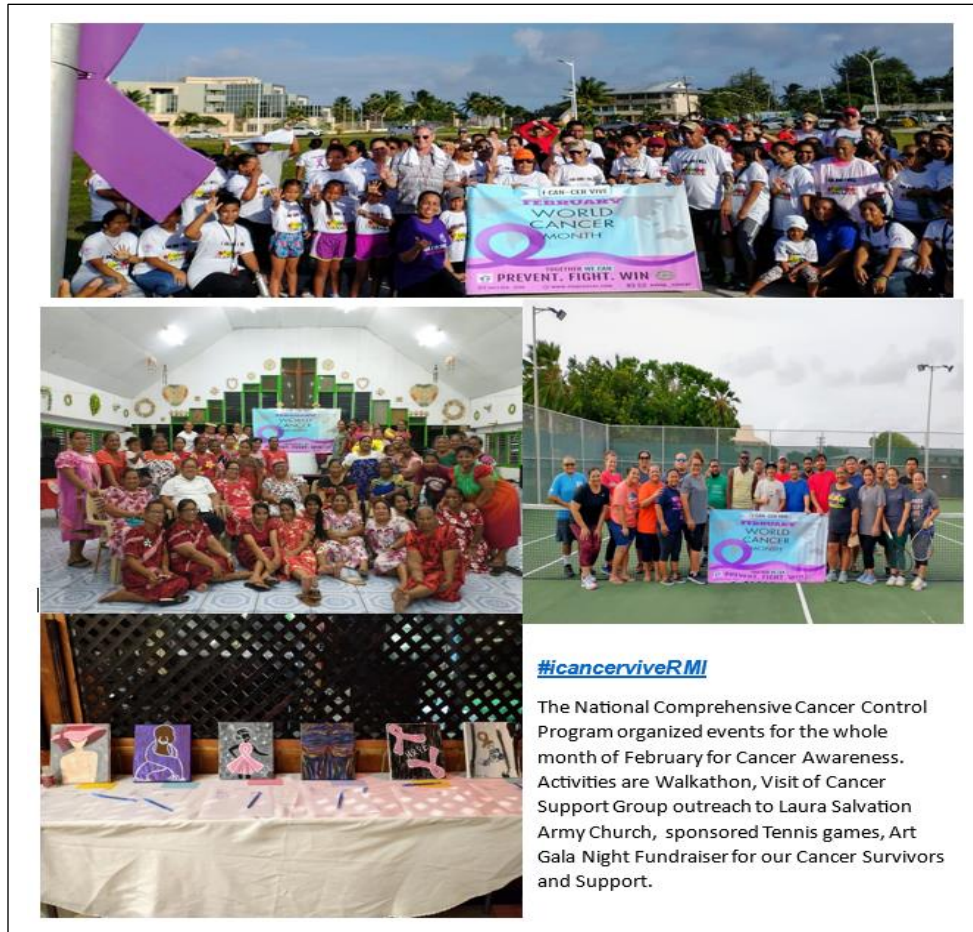


Cervical cancer screening rates for women between the ages of 25 and 49 have increased significantly by 8%, improving from 10.3% in 2017 to 13.4% in 2021.

Figure 31: Breast Cancer Awareness Walkathon and Fishing Tournament, Majuro, October 2020



Figure 32: World Cancer Month, February 2021; #cancerviveRMI



4.1.8 Behavioral Health Services

In November 2020, school outreach activities focusing on mental health, substance abuse, and suicide prevention were conducted at all high schools in Majuro and Ebeye. Following this, in January 2020, Dr. Holden provided mental health first aid training to 15 HAs for a week at the Outer Island Healthcare Services (OIHCS) conference room. Concurrently, efforts continued with mental health and suicide prevention awareness initiatives in Likiep Atoll.

In January 2021, a training session on psychotic disorders was organized for 15 CMI Nursing Students at the Mental Health Clinic. Subsequently, in February 2021, a Gender Based Violence (GBV) training program was conducted for government agencies and NGO partners.

Finally, in April 2021, a GBV training session specifically for MOHHS doctors took place, highlighting the ongoing commitment to addressing mental health and social issues across the region.

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Figure 33: Completed Suicide Rate per 100,000, RMI FY2018-FY2021

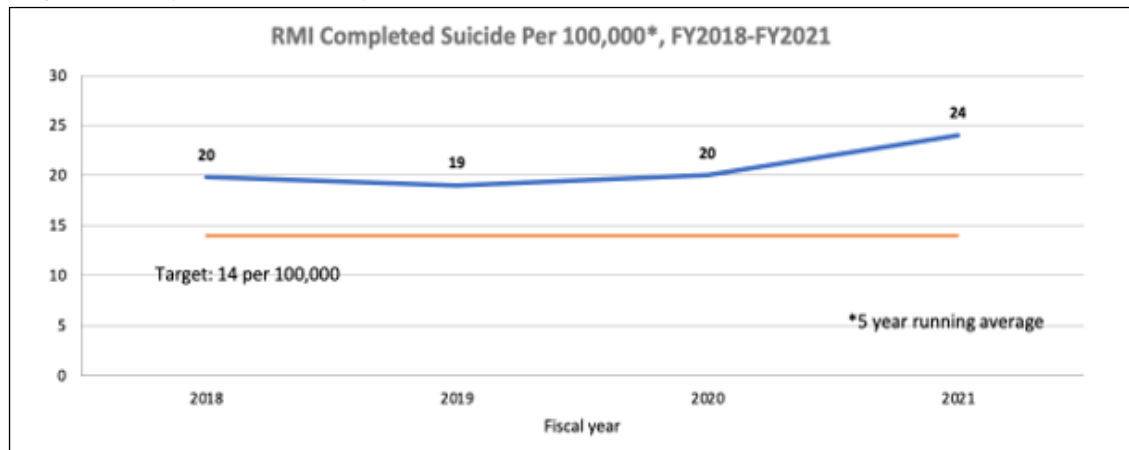


Table 9: Suicide Cases per Gender, RMI FY201-FY2021

No. of Majuro Suicide Cases	FY2018	FY2019	FY2020	FY2021
Attempted Cases	5	11	11	11
Male	3	9	5	9
Female	2	2	6	2
Completed Cases	10	4	7	4
Male	10	4	6	2
Female	0	0	1	2
No. of Ebeye Suicide Cases	FY2018	FY2019	FY2020	FY2021
Attempted Cases	2	4	4	6
Male	2	4	3	4
Female	0	0	1	2
Completed Cases	2	3	2	2
Male	2	3	2	2
Female	0	0	0	0
No. of Outer Islands Suicide Cases	FY2018	FY2019	FY2020	FY2021
Attempted Cases	0	0	0	0
Male	0	0	0	0
Female	0	0	0	0
Completed Cases	1	1	2	0
Male	1	1	2	1
Female	0	0	0	0
No. of RMI Suicide Cases	FY2018	FY2019	FY2020	FY2021
Attempted Cases	7	15	15	17
Male	5	13	8	13
Female	2	2	7	4
Completed Cases	13	8	11	6
Male	13	8	10	5
Female	0	0	1	2

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In November 2020, school outreach activities focused on mental health, substance abuse, and suicide prevention were conducted at all high schools in Majuro and Ebeye.

In January 2020, Dr. Holden provided mental health first aid training to 15 health assistants over the course of a week at the OIHCS conference room. Additionally, in the same month, awareness sessions on mental health and suicide prevention were held in Likiep Atoll.

Following this, in January 2021, a training session on psychotic disorders was conducted for 15 CMI Nursing Students at the Mental Health Clinic. Subsequently, in February 2021, gender-based violence (GBV) training sessions were organized for government agencies and NGO partners.

The final training session, focusing on GBV, took place on April 24, 2021, specifically for MOHHS doctors.

Figure 34: World Health Mental Activities, 2019



Figure 35: Gender Based Violence Trainings, 2021



Figure 36: Mental Health and Suicide Prevention Community Activities



Figure 37: Jined Club and Latter-Day Saints awareness on Mental Health Awareness



This center raises awareness about the importance of proper diet and exercise, which can reduce or eliminate the need for dependency on diabetic medication, while also enhancing the quality of life for patients. Managed by Canvasback Mission in collaboration with MOHH, it extends its support to the Disease Prevention and Control Department and actively participates in the NCD coalition to combat NCDs in RMI.

Major accomplishments identified were:

- The National Board for the Public School System approved the use of the activity book to be used in conjunction with the health curriculum for all public schools. As a result, supplies were gathered and distributed to schools to support the implementation of the activity book. There were 480 individual lessons plans over three years.
- Enhance, adapt, publish, and distribute the diabetes curriculum for elementary school to a total of 80 teachers spanning kindergarten through second grade.
- Conducted training workshops with teachers during the summer months to introduce the new curriculum. Each summer, a total of one training class was held in grant years 2 and 3, spanning a one-week period and accommodating 80 teachers.
- During the summer months, training workshops were conducted with teachers to teach the new curriculum. A total of one training class was held each summer during grant years 2 and 3, spanning a one-week period and accommodating 80 teachers.
- Pre- and post-surveys were conducted on students in 8 public elementary schools to assess health knowledge in kindergarten through to Grade 2 (K-2). The total reach for grades kindergarten through second grades was 1,422.
- Exercise classes and sports programs were conducted for 8 public elementary schools in grades K-2, reaching a total of 1,422 students.

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- Safe play areas were established in all 8 public elementary schools.
- The learning garden program was established in 8 schools.
- Bi-annual workshops were held with vendors outside of the schools, totaling 6 vendor meetings.
- There were two (2) Children's Health Fairs that were conducted.
- Healthy cooking demonstrations were conducted during Parents, Teachers, Associations (PTA) meetings, reaching both parents and students, with a total of 24 demos held.
- Efforts were made to increase vendor participation in the Farmers Market through collaboration with Taiwan Farm.
- Two school gardens were established at Woja Elementary School and Ajeltake Elementary School.
- Additionally, two CLP team outreaches were conducted at Laura Salvation Army and Lokonmok Weto.

Despite making significant progress, challenges have been identified and are being addressed to ensure the continued effectiveness of our efforts. These challenges include:

- A significant portion of the workforce fell ill, which led to the cancellation of the outreach, exacerbated by heavy rains during the CLP outreach.
- Teams were rearranged to ensure that each team had sufficient members to complete outreach activities, thereby avoiding multiple teams leaving the island simultaneously.

Table 10: Program Progress Indicators

Enroll 100 people in prediabetes program	99%
Establish 100 home gardens in DUD area	23%
Serve 10,000 breakfast and lunch items	255%
Exercise with 25 cancer patients	0%
Community Exercise with 50 patients	0%
Screen at least 85% of school children in grades K-6 for height and weight	81%
Conduct CDC approved Pre-Diabetes Course on Majuro	70%
Train and Establish 8 new community health workers by end of 2020	25%
Conduct Community Based exercise classes for diabetics and prediabetics	130%
Conduct Exercise Class at Wellness Center for Cancer Survivor Patients	70%
Train at least 75% of food vendors for public school lunch system	30%
Serve 17,000 healthy meals at the Wellness Center	95%

4.1.10 Taiwan Health Center (THC)

The THC provides services to improve health education as well as provides special medical missions which are requested by MOHHS.

Through coordinated efforts of THC, the following achievements were made:

- The Marshall Hospital Information System (MIHS) was purchased and implemented.
- A Picture Archiving and Communication System (PACS), a medical imaging technology, was purchased and implemented.
- Taiwan Medical Missions for RMI were conducted, focusing on Ear, Nose, and Throat (ENT), Pulmonology, Neurology, Cardiology, Otolaryngology, and Dermatology.

- A Medical Training Program was conducted, with two (2) Medical Internships completed, six (6) in internship, and six (6) in medical school.
- Nursing Training included obtaining a master's degree.
- The RMI NCD Conference was held from 2017 to 2019.
- Taiwan International Cooperation and Development Fund (ICDF) volunteers were involved in Information System and Environmental Health projects.
- An outbreak response for Dengue included the provision of Intravenous (IV) solutions and Dengue Rapid Tests.

There were also Virtual Training Courses that were coordinated and implemented, including:

- Introduction to Oral Cancer.
- Basic Approach to Leprosy and Common Dermatological Diseases.
- Introduction to TB and Epidemiology.
- General Rehabilitation for Stroke.
- Benign Anal Disease.
- Pregnancy-induced Hypertension.

4.1.11 Majuro and Kwajalein Vector Surveillance

A pilot study that involves the collaboration of PIHOA assisted Sterile Insect Technique (SIT) Project that was piloted on Kwajalein Atoll, Ebeye. The project has already completed its 1st Community Baseline Assessment of the Localized Maa Nam Ne Project. Consultation was also conducted concerning the Standard Operating Procedure for the SIT Project.

- Goals of the Maa Nam Ne Project
 - Reduce the risk of mosquito borne disease by reducing mosquito population – review of biology and behavior of Aedes
 - Aedes aegypti are not native to RMI, and contribute to Zika, Chikungunya and Dengue spread
 - Genetically Modified (GM) mosquitoes are released, mate with local females, and produce sterile eggs – female mosquito eggs fail, some sterile male mosquitoes survive, and continue the cycle
 - GM mosquitoes are safe – they have been released in the US, Brazil, and Cayman Islands, and do not affect organisms outside of the Aedes aegypti mosquito
 - Establish baseline surveillance of mosquito population.
 - Community Survey on Knowledge, Attitude and Belief Survey

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4.1.12 Outer Islands Healthcare Service

Table 11: Summary of Outer Island Healthcare Services conducted at the Neighboring Islands, FY2018-FY2021

The healthcare data from Outer Island for the Ministry of Health reveals several key trends and indicators:

a) Births and Deaths:

- Live births have seen a noticeable decline from 64 in FY2018 to 24 in FY2021, indicating a decreasing birth rate.
- The occurrence of stillbirths remained minimal throughout the years.
- Total deaths fluctuated slightly, with a slight decrease observed from FY2018 to FY2021. Most deaths were among individuals aged 50 years and over.

b) Type and Number of Complaints:

- Complaints varied across different categories with fluctuations over the years.
- Common complaints included conjunctivitis, headaches, acute respiratory infections, and pneumonia. Notably, there was a significant decrease in reported cases of influenza from FY2018 to FY2021.

c) Malnutrition, Suicide, and Dental Issues:

- Cases of malnutrition, including vitamin A deficiency, were reported with fluctuations.
- Minimal cases of suicide were reported, with two cases in FY2020 and one in FY2021.

- The number of reported dental issues, including toothaches and tooth extractions, decreased over the years.

d) Family Planning and Prenatal Care:

- A decrease was observed in the number of patients receiving family planning services, including FP pills, condoms, and Depo-Provera contraceptive injections.
- Prenatal and postnatal care showed a decrease in the number of visits and exams over the years, suggesting potential gaps in maternal healthcare services.

e) Number of Patients Seen and Referrals:

- The total number of patients seen decreased across all age groups, indicating a potential decrease in healthcare utilization or availability.
- Referrals fluctuated over the years, with a slight decrease from FY2019 to FY2021.

	Categories	FY2018	FY2019	FY2020	FY2021
Births	Live birth	64	43	43	24
	Male	24	25	24	20
	Female	40	18	20	8
	Still birth	0	0	1	0
Deaths	Total Number of deaths	34	30	32	27
	Under 1 year old	2	8	4	4
	Number of deaths from 1 - 4 years old	1	0	1	1
	Number of deaths from 15 - 49 years old	3	9	11	5
Type and Number of Complaints	Number of deaths from 50 years old and over	27	13	16	17
	Burns	28	17	24	25
	Conjunctivitis	903	250	374	523
	Headaches	1241	1120	1284	879
	Acute Respiratory Infection	1118	970	1032	571
	Pneumonia	274	224	186	148
	Non Infectious Diarrhea	1278	1165	1026	816
	Abdominal Pain	519	595	572	384
	Open Wounds	711	332	323	330
	Chicken Pox	102	61	82	63
	Fish Poisoning	24	32	17	5
	Gonorrhea/syphilis etc.	19	18	6	10
	Scabies	252	312	284	303
Malnutrition	Influenza	2871	2854	2580	1369
	Vitamin A Deficiency	45	23	53	33
Whooping Cough	Malnutrition	6	0	0	0
	Whooping Cough	3	0	0	0
Suicide	Suicide	0	0	2	1
Dental	Tooth ache	795	1084	1089	687
	Tooth Extractions	40	259	230	70
	Other tooth problems	85	26	27	87
Family Planning	FP Pills	8	3	2	3
	Condom	5	25	6	22
	Depo-Provera Contraceptive Injections	136	94	119	107
Prenatal	Total Prenatal Visits	245	183	194	134
	Number of 1st visit	20	31	24	12
	1st trimester	65	49	56	45
	2nd trimester	110	82	68	50
	3rd trimester	81	81	69	39
	Post-Partum Exam	25	14	8	5
	Well-Baby Clinic	48	37	27	21
	Other	807	2104	1766	1510
Number of Patients seen	Less than 1 year old seen	809	675	649	464
	1-5 years old	2518	2203	2208	1479
	6-14 years	3283	3049	3262	2292
	15-49 years	5642	4941	5494	4135
	50 years old and over	2858	2939	2963	2437
	Total Number seen	15238	13573	14576	10807
Number of Patients referred	Number of referrals to Majuro	71	166	54	46
	Number of Referrals to Ebeye	2	6	2	2
	Total referrals	72	64	56	48
Special Program	Total children rec'd vit-A	899	302	0	19
	Total children rec'd worms med	889	426	2	15

f) Special Programs:

- There was a significant decrease in the number of children receiving vitamin A and worm medication from FY2018 to FY2020, possibly indicating changes in public health programs or interventions.

This data provides valuable insights into healthcare trends and challenges on the Neighboring Islands of RMI. It highlights areas of concern such as declining birth rates, fluctuations in healthcare utilization, and potential gaps in maternal and child health services. These findings can guide policymakers and healthcare providers in developing targeted interventions to improve healthcare delivery and outcomes in the region.

5. HEALTHCARE SERVICES

5.1 Bureau of Majuro Hospital Services

The Assistant Secretary for Majuro Hospital Services is responsible for the management and overall operation of Majuro Hospital Leroij Atama Zedkeia Medical Center commonly known as Majuro Hospital serving inpatient, outpatient, public health clinics and ancillary services. In addition to this core role there are other areas that fall under the Hospital Services jurisdiction as seen in Table 11.

Table 12: Majuro Hospital Services

Pharmaceutical Services	Biomedical Services
Laboratory Services	Radiology Services
Dental Services	Medical Records
Clinical Services Network	Nursing Services
Medical Services	Medical Referral Services
Blood and Ambulance Services	Specialist Visiting Teams

5.1.1 Hospital Administration

Through the Fiscal Year 2017 through to Fiscal Year 2021, there were challenges faced by the Hospital administration with solutions forward and accomplishments. Listed below are the annual monitoring tasks moving forward:

- Procure the necessary tools and hire qualified staff to effectively manage Majuro Hospital services, in close coordination with the Secretary of MOHHS.
- Develop a plan and budget to address unexpected events within hospital services, ensuring alignment with the minimum wage of MOHHS staff. Collaborate with human resources (HR) and the respective departments to address vacant positions.
- Elevate expectations for graduate staff by fostering skill enhancement in critical areas. Coordinate with donors to identify qualified staff and secure funding, thereby increasing the number of skilled professionals in the workforce.
- Establish a coordinated approach with HR, leveraging training opportunities to enhance skills and subsequently increase the allocated budget for training.
- Operate within the constraints of the limited budget for hospital services, ensuring ongoing monitoring of funds and providing comprehensive support for all financial needs.
- Engage in fundraising efforts with donor partners to secure donations for the procurement of equipment and supplies. Allocate these resources strategically in priority categories to enhance diagnostic services, coordinating closely with relevant departments and the finance unit.

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Major accomplishments identified were:

- Maintained regular communication through weekly meetings with the Senior Leadership Team.
- Conducted bi-weekly doctor's grand rounds to facilitate knowledge exchange among medical professionals.
- Successfully organized the hospital's monthly general cleanup on the last Friday of each month.
- Continued the implementation of the nurse practitioner (NP), nursing development, and medical internship programs.
- Progressed with Phase I of the hospital construction project.
- Received a generous donation of wheelchairs from the Japanese Government.
- Benefited from the donation of cleaning materials by the Women's Club, contributing to a hygienic hospital environment.
- Successfully hosted Taiwanese medical professionals, including an orthopedic surgeon, dermatologist, plastic surgeon, ophthalmologist, and anesthesiologist, completing their mission.
- Facilitated a one-month training program for a physical therapist and a surgeon in Taiwan.
- Empowered radiology staff through their attendance at a workshop organized by the International Atomic Energy Agency (IAEA).
- Conducted effective community outreach activities during Diabetics Day.
- Strengthened laboratory management through targeted training initiatives.

5.1.2 Rehabilitation Department

Table 13: Majuro Hospital - Rehabilitation Department, FY2018-FY2021

Majuro Hospital - Rehabilitation Department, FY2018-FY2021				
	FY2018	FY2019	FY2020	FY2021
Patient Statistics				
New Referrals	633	998	944	1019
Average no. of treatments per day	32	41	44	45
Total treatments for the month	7895	10102	11047	11405
Prosthetics/ Orthotics Services				
Completed Prostheses	8	7	12	8
Prosthesis under construction	17	14	25	22
Patient who had 1st measurement	11	18	20	30
Prosthetic modification/adjustments made	19	24	19	19
Prosthetic re-paint	0	0	0	0
Shoe Modification (a pair)	7	4	1	1
Foot Care (Diabetic Foot Care) Clinic				
New Patient	509	462	485	537
Follow-up Patient	427	536	581	738
Poor Sensation in the feet	577	749	471	556
Referred Ulcer	162	381	461	513
Patient receiving/ received the foot care treatment	934	1002	1057	1267
Healed ulcer	53	113	139	168
DFC patient: yet still had an Amputation	22	27	20	33

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Foot Care Education	934	1002	1057	1267
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Figure 38: Percentage of Referral Ulcer Completion rate in reference to new and follow-up patients seen at the Footcare (Diabetic Footcare) Clinic, Rehabilitation Department, Majuro Hospital, FY2018-FY2021

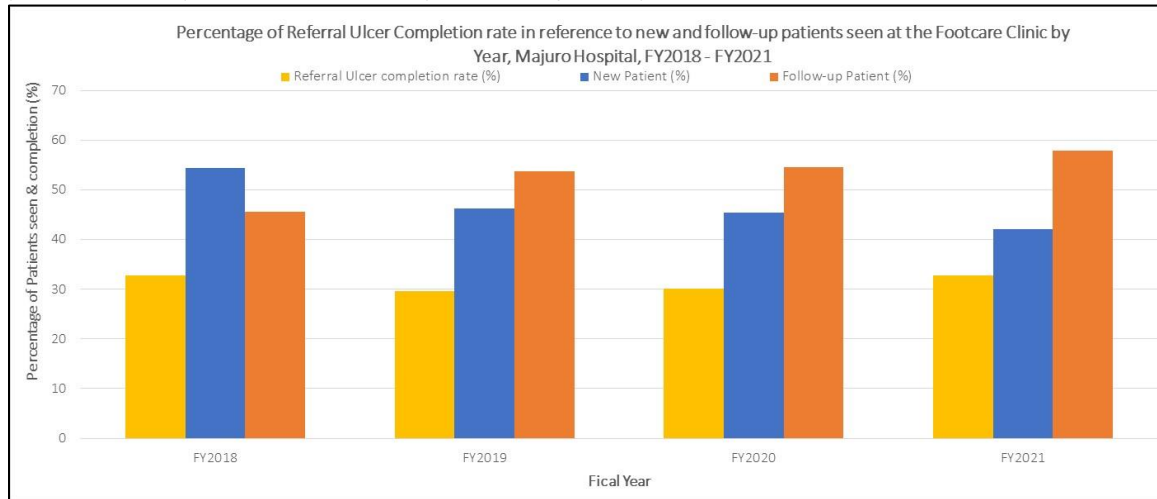
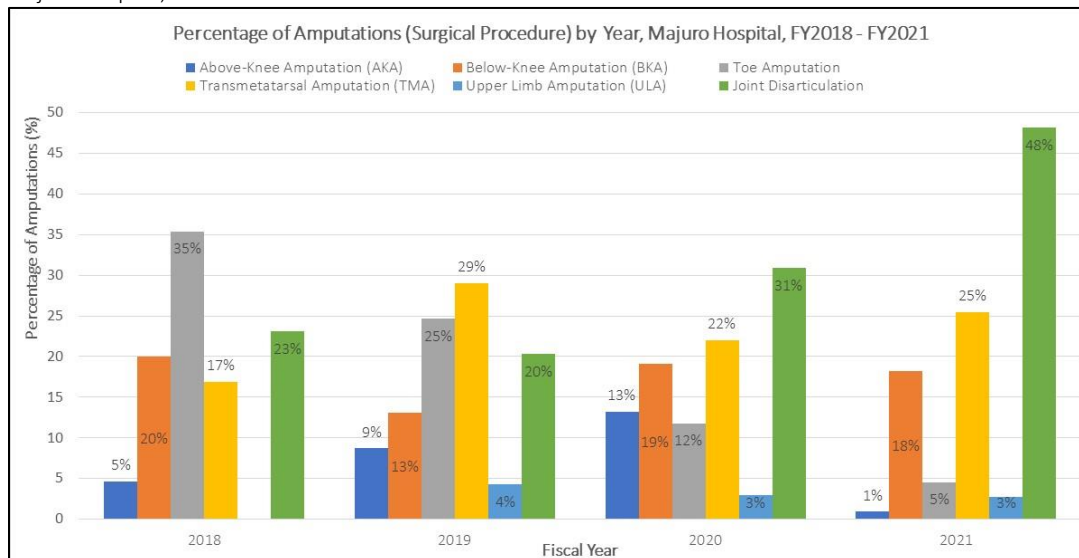


Figure 39: Graph of the Percentage of Amputations carried out Footcare (Diabetic Footcare) Clinic, Rehabilitation Department, Majuro Hospital, FY2018-FY2021



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Figure 40: Diabetic Foot Care Training, Majuro Rehabilitation Department, April 20-22, 2021



Conducted and facilitated Diabetic Foot Care Training to the 18 Health Assistant Students and Outpatient Nurses from April 20-22, 2021. This training is in collaboration with Majuro Rehabilitation Department, NCD Team, Public Health, Health Promotion and Outer Islands Health Care Services.

Figure 41: Foot Care in the Outer Islands



Therapy Technician Edward Konelios in the NCD Outer Island Out-reach Program in Wotje Atoll last June 4 to 18, 2021, in collaboration with the Public Health and Health Promotion Dept.

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Figure 42: Wheelchair donation from Latter Day Saints



Department received 120 wheelchairs, 2 boxes of cane, 2 cases of Quan Cane, 3 boxes of Crutches, 3 cases forearm crutches & 10 boxes of walkers for Latter Day Saints. The donation was shared by Majuro Hospital and Ebeye Hospital. Items are allocated for the patients who are in need and can't afford to purchase.

5.1.3 Radiology Department

Table 14: Majuro Hospital Radiology Services, FY2018-FY2021

Majuro Hospital Radiology Services, FY2018-FY2021				
	FY2018	FY2019	FY2020	FY2021
Xray Study	11,692	10,087	9,820	10,236
Ultrasound Study	659	1,567	2,212	3,065
CT Scan Study	958	1,156	715	1,750
Endoscopy Study	84	30	57	72
Mammogram	0	63	74	0
Total Study	13,393	12,903	12,878	15,123

The data in Table 14, suggests varying trends in the utilization of different radiology services at Majuro Hospital over the four-year period. While some services showed steady increases (e.g., ultrasound), others exhibited fluctuations or changes in utilization (e.g., X-ray, CT scan, endoscopy). Understanding these trends can help healthcare providers allocate resources effectively and address changing healthcare needs within the community

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5.1.4 Pharmacy Department

Table 15: Majuro Hospital Pharmacy Services

Majuro Pharmacy	FY2018	FY2019	FY2020	FY2021
OUTPATIENT				
No. of prescriptions	113,135	4,052,634	132,707	138,097
Ave. prescription/day	1,491	1,287	1,426	1,710
No. of items dispensed	3,218,356	9,421,226	17,008,133	19,576,835
INPATIENT				
No. of prescriptions	10,951	179,529	9,014	8,728
Ave. prescription/day	299	195	449	262
No. of items dispensed	166,811	1,127,029	1,650,162	1,610,644
WARDS ORDER				
No. of prescriptions	4,816	170,527	2,464	2,072
Ave. prescription/day	304	77	108	100
No. of items dispensed	426,997	1,251,570	128,139	189,419
LAURA ORDERS				
No. of prescriptions	12,707	99,855	55	66
Ave. prescription/day	806	6	2	15
No. of items dispensed	165,609	1,377,826	3,255,203	3,906,560
OUTER ISLAND ORDERS				
No. of prescriptions	17,061	278,204	371	270
Ave. prescription/day	12	30	46	25
No. of items dispensed	13,654	2,719,478	9,470,414	3,439,776
EBEYE ORDERS				
No. of prescriptions	7	9	14	6
No. of items dispensed	12,680	4,140	297,794	96,272
177 ORDERS				
No. of prescriptions	35,203	152,987	865	1,057
No. of items dispensed	465,154	758,552	968,805	301,526

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5.1.5 Laboratory Department

Table 16: Majuro Hospital Laboratory Services FY2018-FY2021

Majuro Hospital	FY2018	FY2019	FY2020	FY2021
Patients/ Clients ^a	26,049	23,045	29,047	24,406
Specimens (<i>registered</i>)	49,496	43,795	47,318	39,109
Phlebotomy	16,704	16,405	23,170	17,312
Tests Performed	158,235	141,463	157,823	171,263
DG Shipments	139	190	105	100
Specimens Processed				
Microbiology - Blood Culture	12,367	261	75	85
Microbiology - Swab		500	590	904
Microbiology - Urine		8,432	6,838	7,064
Microbiology - Stool		1,784	1,837	3,481
Microbiology, TB - Sputum; Gastric Lavage; Body Fluids; Others		1,258	1,183	1,443
Microbiology - Body Fluid (Cell Count; Gram Stain; Culture)		63	61	100
Microbiology - Skin Slit/ Smear				19
Microbiology, Molecular - Urine and/or Swab		1,068	1,016	-
Immunology (Infection Serology)	8,415	8,480	7,732	6,758
Hematology	10,047	10,035	18,972	11,298
Coagulation		1,338	1,402	1,680
Blood Transfusion Service	1,997	2,287	1,820	3,034
Biochemistry - General	10,358	8,619	8,275	8,655
Biochemistry - HbA1c		1,744	2,026	1,737
Biochemistry - Immunoassay		20	59	-
Biochemistry (Urine)				-
Anatomic Pathology - Gynecologic Cytology (PAP Smears)	-	356	197	363
Anatomic Pathology - Non-gynecologic cytology of Body Fluids, Smear Impressions, Etc. (Referred)		36	28	15
Anatomic Pathology - Surgical Tissues (Referred)		205	274	239
Outbreak Response (Specimens for Dengue Virus PCR and Serotype; Measles; Mumps) (*)			42	9
Outbreak Response - COVID-19				2,835
Outbreak Response - Influenzas				28
OTHERS (non-diagnostic specimens, e.g., forensic samples)	4,926	2	4	60
TOTAL SPECIMEN PROCESSED	48,110	46,488	52,431	49,807
Test Performed				
MICROBIOLOGY	24,350	26,375	26,454	36,196
Urine Chemistry (Multistix 10SG)		8,538	5,754	6,939
Urine Sediment Microscopy		7,162	6,690	6,939

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Pregnancy		586	709	896
Stool Examination (Microscopy)		1,719	1,817	3,438
Fecal Occult Blood		319	235	236
Stool Rotavirus IgG (EIA)		28	45	-
Molecular Microbiology - Chlamydia trachomatis (CT)		1,068	1,016	-
Molecular Microbiology - Neisseria gonorrhea (NG)		1,071	1,016	-
Culture - Blood		244	76	101
Culture - Pus and Wound Swabs		398	419	559
Culture - Swabs (ENT, ETT, High vaginal)		93	50	84
Culture - Devices (Catheter tips, etc....)		4	1	6
Culture - Urine		173	273	1,111
Culture - Other Body Fluids (Pleural, Ascitis, etc....)		31	53	58
Culture - Stool		106	51	84
Culture - Sputum		80	76	124
Bacterial Identification Gram Negative Bacteria		225	370	654
Bacterial Identification Gram Positive Bacteria		203	236	231
Fungal Identification		17	28	210
Antimicrobial Susceptibility Test on All Bacterial Isolates		471	3,227	9,693
Other Microbiology Section Activities - Culture Media Preparation (Blood Agar, MacConkey and 5 others)		2,095	2,597	2,798
Leprosy (Skin-slit AFB Smears)		1	-	19
TB Section - Acid Fast Bacilli (AFB) Stain on Sputum and other Body Fluids	4,372	1,224	1,290	1,531
TB Section - Molecular (GeneXpert for detection of MTB and Rifampin-resistant MTB)		285	366	463
TB - EQA		231	55	21
Semen Analysis	-	3	4	1
IMMUNOLOGY	17,718	12,594	18,787	21,617
RPR		5,096	5,093	7,374
TPA-Syphilis		1,302	1,519	1,942
HBsAg		3,151	2,920	6,614
HCV, Ab		764	1,198	1,886
HIV 1/2, Ab		1,769	2,359	3,161
Dengue NS1, IgG & IgM		464	5,648	638
H. pylori Ab, IgG		16	33	-
ASOT		24	15	-
Rheumatic Fever		8	2	2
HEMATOLOGY & COAGULATION	12,441	12,119	22,802	14,928
Complete Blood Count (Automated)		9,860	19,680	11,657
Blood Film Examination		82	100	577

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ESR		168	207	175
Protime		1,346	1,848	1,501
Partial Thromboplastin Time		663	967	1,018
BIOCHEMISTRY	94,498	72,776	82,717	90,977
Sodium		5,713	6,134	7,742
Potassium		5,829	5,058	7,948
Chloride		1,652	2,359	2,785
Glucose		6,668	6,474	6,696
Hemoglobin A1c		2,023	2,026	1,584
Blood Urea Nitrogen (BUN)		6,000	7,743	8,147
Creatinine		6,090	8,090	6,953
Uric Acid		4,580	4,767	5,607
Calcium		1,467	2,470	2,414
Total Protein		1,192	1,229	1,501
Albumin		1,826	3,000	3,349
Bilirubin, Total		1,392	1,521	1,601
Bilirubin, Direct		1,092	1,434	1,356
Aspartate Aminotransferase (AST)		5,868	6,545	6,685
Alanine Aminotransferase (ALT)		5,066	6,519	6,606
Alkaline Phosphatase (ALP)		2,397	2,511	2,336
Gamma Glutamyl Transferase (GGT)		390	536	596
Lactose Dehydrogenase LDH)		787	1,309	1,651
Cholesterol, Total		3,569	3,894	4,486
Cholesterol, High Density Lipoprotein (HDL)		2,826	2,554	2,795
Cholesterol, Low Density Lipoprotein (LDL)		1,576	2,231	2,469
Triglycerides		3,285	2,854	3,729
Creatine Kinase		544	517	644
Creatine Kinase Isoenzyme MB		445	405	627
Amylase		499	537	670
Lipase		-	-	-
IMMUNOCHEMISTRY	722	-	-	-
ANATOMIC PATHOLOGY	-	-	-	-
BLOOD TRASNFUSION SERVICE	4,134	4,256	6,883	5,653
Blood Typing - Blood Component Recipients		373	746	432
Blood Typing - Non-recipients		886	1,673	1,262
Blood Donors Screen - Blood Type (Blood-borne infectious agents screening reported under Immunology)		916	2,013	1,120
Cross Match		726	840	927
Units Collected		681	768	895

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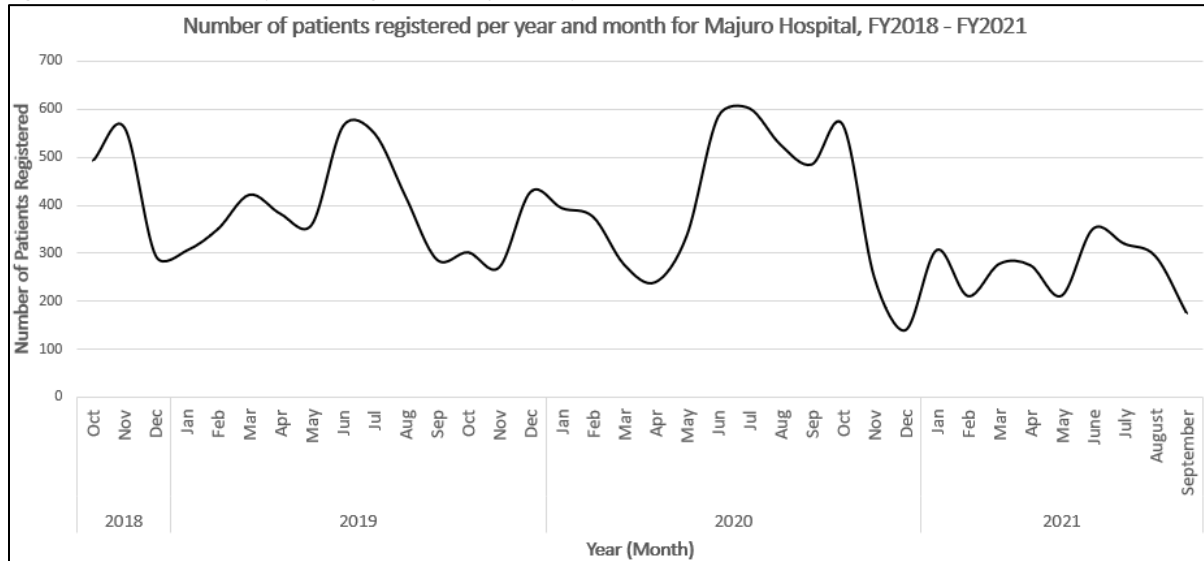
Units Issued - Fresh Whole Blood or Packed Red Blood Cells		661	763	910
Platelets Concentrate		6	71	19
Fresh Frozen Plasma Issued		7	9	88
LABORATORY SURVEILLANCE - COVID-19 Virus Detection	-	-	180	2,960
Influenza A & B			-	52
COVID-19 (Abbott ID Now) NAAT			-	668
COVID-19 (Abbott Binax Now) Antigen Test			-	1,191
COVID-19 (Cepheid Xpert Xpress) NAAT			-	1,044
COVID-19 (CoronaCheck IgM/IgG Antibodies)			180	5
TOTAL TESTS AND RELATED SERVICES (Provided locally)	158,235	128,120	157,823	172,331
SPECIMEN REFERRAL				
Blood (Serum or Plasma for Special Chemistries, Immunoassays and Genetic Analysis)		636	438	682
Surgical Specimens		203	258	355
Gynecologic Smears		333	171	433
Non-gynecologic Smears		34	33	27
TB Specimens		542	480	868
Drugs of Abuse Tests on a Deceased Body		2	7	-
Outbreak Response Blood - Specimens for Dengue Virus PCR and Serotype; Measles; Mumps		-	33	20
Non-diagnostic Specimens (Environmental samples, etc.)		-		54
Total number of specimens referred		1,750	1,420	2,439

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5.1.6 Medical Records Department

Majuro Hospital's number of patients registered in the Marshall Islands allows us to gain insights into service utilization, disease trends, and the impact of socioeconomic factors, including the COVID-19 outbreak on August 8, 2021.

Figure 43: Number of new patients registered, Majuro Hospital, FY2018-FY2021



5.2 Bureau of Kwajalein Atoll Health Care Services

The Assistant Secretary for Kwajalein Atoll Health Services is responsible for management and overall operation of Lerioj Kitlang Kabua Memorial Hospital commonly known as Ebeye Hospital serving inpatient, outpatient, public health clinics and ancillary services. Medical and public health staff conduct outreach to the health centers in the outer islands and within the community as well. In addition to this core role there are other areas that fall under the Hospital Services jurisdiction as seen in Table 14.

Table 17: Kwajalein Hospital Services

Pharmaceutical Services	Biomedical Services
Laboratory Services	Radiology Services
Dental Services	Medical Records
Clinical Services Network	Nursing Services
Medical Services	Blood and Ambulance Services
Public Health Programs and Clinics	Specialist Visiting Teams

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5.2.1 Kwajalein Rehabilitation Services

Table 18: Ebeye Hospital - Rehabilitation Department, FY2018-FY2021

Ebeye Hospital - Rehabilitation Department, FY2018-FY2021				
	FY2018	FY2019	FY2020	FY2021
Patient contact statistics				
Procedures	1305	965	816	767
Patient seen	547	451	350	322
Male	299	217	208	214
Female	248	234	142	98
Total	547	451	350	322
Types of cases				
Diabetes	401	341	267	216
Hypertension	331	274	240	266
Foot screening	212	223	87	6
Footwear modification/off-loading/callus removal & nail trimming	26	60	27	22
General weakness	14	6	8	7
Diabetic foot/gangrene/ulcer	28	20	24	23
Hearing aid (maintenance, tubing, impressions, batteries)	3	2	1	1
Spinal cord injury	5	7	2	1
Hip/knee/ankle/foot injury	25	19	38	40
Quadriplegic	0	0	0	0
Paraplegic/paraparesis	6	4	3	1
Frozen shoulder	33	12	7	16
Back pain/injury/lbp/ubp	53	42	25	38
Sciatica	2	3	2	3
Stroke/cva	64	37	31	42
Fracture	4	2	2	12
Arthritis/gout/osteoarthritis	22	8	7	4
Shoulder/elbow/wrist/hand/finger injury	42	31	32	42
Carpal tunnel syndrome	0	3	0	0
Post-TKA	7	7	18	24
Deg	59	50	20	29
Nerve impingement	8	2	0	0
Burn	0	0	0	0
Cerebral palsy	1	0	0	1
Neck injury	6	4	0	1
Parkinson's disease	3	0	0	0
Abdominal strain	1	0	0	0
Post-amputation (lls)	5	0	3	5
Others	0	0	0	0
Total	1361	1157	844	800

5.2.2 Kwajalein Radiology Services

Table 19: Ebeye Hospital Radiology Services

Ebeye Hospital Radiology Services				
	FY2018	FY2019	FY2020	FY2021
Xray Study	2,535	2,780	1,473	769

5.2.3 Kwajalein Laboratory Services

Table 20: Ebeye Hospital Laboratory Services

Ebeye Hospital Laboratory	FY2018	FY2019	FY2020	FY2021
Summary				
Patients/ Clients	8,675	7,322	2,363	
Specimens	14,366	8,558	9,053	9,053
Tests Performed	55,903	38,524	64,428	64,428
DG Shipments		29	16	16
Specimens Processed				
Microbiology	5,192	2,526	3,101	4,783
Immunology	2,830	1,631	1,969	963
Hematology & Coagulation	2,777	2,322	2,445	1,349
Blood Bank	733	675	354	249
Biochemistry	1,877	1,210	1,550	69
Immunochemistry	171	90	117	0
Anatomic Pathology	0	0	0	0
TB Lab	424	189	309	0
Referrals	434	218	280	23
Total Specimens Processed	14,438	8,861	9,170	5,786
Test Performed				
Microbiology	5,579	27,29	27,387	45,742
Immunology	6,322	4,834	7,201	3,271
Hematology & Coagulation	3,060	2389	2,445	1,367
Blood Bank	1,861	1,124	394	797
Biochemistry	37,588	27,516	31,359	741
Immunochemistry	888	441	349	0
Anatomic Pathology	0	0	0	0
TB Lab	605	243	355	0
TOTALS	55,903	39,276	69,490	51,918

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5.3 Bureau of Nursing Services

Over the period from 2018 to 2021, the Bureau of Nursing within MOHHS has been instrumental in advancing the delivery of quality healthcare services across RMI. The dedicated efforts of nursing professionals have played a pivotal role in addressing the healthcare challenges faced by our nation.

The nursing staff demonstrated resilience and adaptability during the unprecedented COVID-19 pandemic, providing essential care while navigating evolving circumstances. The Bureau has been actively involved in immunization campaigns, maternal and child health initiatives, and community health outreach, contributing significantly to public health goals.

Challenges such as workforce shortages and resource constraints were met with strategic planning and training programs to enhance the capabilities of our nursing workforce. The commitment and expertise of the Bureau of Nursing have been crucial in sustaining and improving the overall health outcomes for the people of the Republic of the Marshall Islands.

Table 21: Nursing Staffing by Gender, FY2021

Position	Majuro Hospital			Majuro Primary Health Care			Kwajalein Memorial			Kwajalein PHC			Outer Island Health Center			177 HCP			Total		
Gender	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Graduate Nurse	29	57	86	14	18	32	7	23	30	1	6	7	0	0	0	1	0	1	52	104	156
Midwives	0	5	5	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	8	8
Practical Nurse	1	5	6	16	9	25	2	7	9	1	2	3	0	0	0	0	0	0	20	23	43
Nurse Aides	4	5	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	9
Grand Total	34	72	106	30	28	58	9	32	41	2	8	10	0	0	0	1	0	1	76	140	216

Source: Human Resources for Health Department; Legend: M – Male, F – Female, T - Total

5.3.1 Bureau of Majuro Nursing

Table 22: Majuro Hospital Admission data, FY2018-FY2021

Hospital Department	Nursing Bureau Categories	FY2018	FY2019	FY2020	FY2021
Wards Data – Outpatient	Grand total of Outpatient Visits	20788	16,122	20,370	28795
	Doctors' Statistics	16444	13,423	17,060	22520
	Medexs' Statistics	510	212	350	524
	Dressings	3569	269	28	1767
Emergency	Number of Monthly Visits	9847	79.5	1,163.93	8775
	Number of deceased	77	32	73	899
	Number of Observations	1050	979	890	1361
	Number of Completed Suicides	2	0	3	3
	Number of Attempted Suicides	16	11	5	6
	Number of Assaulted cases	55	44	53	50
	Number of motor vehicular accident	0	76	73	109
	Number of admissions	567	382	630	670
Surgical	Number of discharge	554	386	644	661
	Number of deceased	31	19	12	20
	Number of admissions	374	338	541	302
Pediatric	Number of discharges	367	327	533	298
	Number of deceased	5	3	8	1
	Grand total Admission	648	1113	887	1504
Maternity Moms Delivered	Number of admissions	698	474	678	654
	Number of discharge	712	468	688	658
	Number of deceased	55	29	29	43
	Number of admissions	109	65	124	136
ICU	Number of discharges	70	17	55	47
	Number of deceased	35	31	51	57
	Number of Ventilated patients		38	58	59
	Number of admissions	54	31	31	46
TB Isolation	Number of discharge	47	19	19	45
	Number of deceased	0	0	0	0
	Total Number of surgeries done	1034	902	1,228.00	1557
Operating Room	Number of General Surgeries	522	369	613	572
	Number of Orthopedics	166	162	231	345
	Number of OBGYN	209	172	259	259
	Number of Ophthalmology	136	91	48	320
	Number of Dental			1	0
	Number of ENT		4	71	81
	Number of Above Knee Amputation (AKA)	4	4	8	0
	Number of disarticulations, TMA, and amputations (toes, fingers)	34	35	69	69
	Number of BKA (Below knee Amputation)	7	8	9	19

The following are in reference to Table 19 above:

- a) Outpatient Department (OPD) Visits:
 - The data reveals a consistent upward trend in OPD visits from FY2018 to FY2021, peaking at 28,795 visits in FY2021.
 - Notably, visits to doctors and Medexs also show an increasing trend over the years, indicating a growing demand for ambulatory care services.
- b) Emergency Department:
 - Monthly visits to the Emergency Department display fluctuations, with a significant decrease in FY2019 followed by an increase in FY2020 and a slight decrease in FY2021.
 - Fluctuations are also observed in admissions, discharges, and observations, highlighting the need for further investigation into contributing factors.
 - Of concern is the notable increase in deceased cases in FY2021 compared to previous years, signaling potential areas for improvement in emergency care protocols.
- c) Surgical Department:
 - Admissions and discharges in the Surgical Department demonstrate a consistent upward trend over the years, with a slight decrease noted in FY2021.
 - The number of deceased cases fluctuates but generally shows a decreasing trend, indicating improvements in surgical outcomes and patient safety.
- d) Pediatric Department:
 - Admissions and discharges in the Pediatric Department fluctuate but show a general increasing trend over the years, necessitating potential resource adjustments to accommodate the growing demand.
 - While deceased cases remain relatively low compared to other departments, fluctuations warrant ongoing monitoring and improvement efforts.
- e) Maternity Department:
 - The number of admissions for moms delivered displays a fluctuating trend, reaching a peak of 1,504 admissions in FY2021, highlighting the need for continued support and resources for maternal care services.
- f) Special Cases:
 - Data on special cases, including suicides, attempted suicides, assaulted cases, and motor vehicular accidents, demonstrate varying numbers over the years, emphasizing the hospital's critical role in responding to diverse public health challenges.

Recommendations:

The analysis of key performance indicators (KPIs) for the Nursing Bureau at Majuro Hospital provides valuable insights into the hospital's performance, efficiency, and quality of care provided to patients.

Based on the findings, the MOHHS recommends:

- Further investigation into factors contributing to fluctuations in emergency department visits and deceased cases.
- Prioritization of efforts to improve emergency and surgical care protocols to reduce the number of deceased cases.
- Consideration of resource adjustments to accommodate the growing demand for pediatric and maternal care services.
- Ongoing monitoring and improvement of services to ensure high-quality patient care across all nursing departments.
- By implementing targeted interventions and improvements, Majuro Hospital can enhance its ability to meet the healthcare needs of the Republic of Marshall Islands' population effectively.

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5.3.2 Kwajalein Nursing Department

Table 23: Summary of the Kwajalein Nursing Bureau Performance Indicators, FY2018-FY2021

Department	Nursing Bureau Performance Indicators	FY2018	FY2019	FY2020	FY2021
Kwajalein Hospital	No of meetings done in each unit	12	27	20	35
Kwajalein Hospital	Number of Continuing Medical Education (CME)	6	11	31	22
Kwajalein Hospital	Number of Basic Life Support (BLS) Training	0	1	0	0
Kwajalein Hospital	Number of Pediatric Advanced Life Support (PALS) Training	1	2	0	0
Kwajalein Hospital	Number of Advanced Cardiovascular Life Support (ACLS) Training	0	1	0	26
Kwajalein Hospital	Number of Certified BLS Provider	30	26	26	6
Kwajalein Hospital	Number of Certified PALS Provider	8	6	6	16
Kwajalein Hospital	Number of Certified ACLS Provider	15	16	16	3
Kwajalein Hospital	Number of Certified BLS Instructor	3	3	3	1
Kwajalein Hospital	Number of Certified PALS Instructor	1	1	1	0
Kwajalein Hospital	Number of Certified ACLS Instructor	0	0	0	2
Kwajalein Hospital	Number of Bachelor of Science in Nursing (BSN)	2	2	2	16
Kwajalein Hospital	Number of Registered BSN	15	16	16	3
Kwajalein Hospital	Number of Associate Degree in Nursing	4	4	3	7
Kwajalein Hospital	Number of Diploma in Nursing	9	7	7	1
Kwajalein Hospital	Number of Midwife	1	1	1	5
Kwajalein Hospital	Number of Practical Nurses	3	3	3	3
Kwajalein Hospital	Number of newly hired Nurses	7	1	0	3
Kwajalein Hospital	Number of Nurses on Educational Leave	2	0	0	0
Kwajalein Hospital	Number of Nurses resigned/ retired/transferred/ death	2	1	4	0

The provided key performance indicators (KPIs) for Kwajalein Hospital, offer valuable insights into various aspects of the hospital's nursing bureau performance over the fiscal years 2018 to 2021. Here's an interpretation of the data:

- a) Meetings Conducted:
 - The number of meetings held in each unit has steadily increased from 12 in FY2018 to 35 in FY2021. This suggests a proactive approach to communication and collaboration within the nursing units.
- b) Continuing Medical Education (CME):
 - There's a notable increase in the number of CMEs conducted over the years, peaking at 31 in FY2020. This indicates a commitment to ongoing professional development among nursing staff.
- c) Basic Life Support (BLS) and Pediatric Advanced Life Support (PALS) Training:
 - While there's minimal BLS and PALS training conducted, it's noteworthy that ACLS training has significantly increased, particularly in FY2021, with 26 sessions. This suggests a focus on advanced cardiac care training.
- d) Certifications:
 - The number of certified BLS, PALS, and ACLS providers fluctuates over the years, possibly indicating turnover or changes in training priorities. However, there's a decrease in the number of certified BLS providers in FY2021.
- e) Instructor Certifications:
 - The number of certified BLS and PALS instructors remains relatively stable, indicating consistent availability of qualified instructors for training sessions.
- f) Education Levels:
 - There's a notable increase in the number of Bachelor of Science in Nursing (BSN) and Registered BSN staff, reflecting efforts to enhance the qualifications of nursing personnel.
- g) Staff Composition:
 - The data shows fluctuations in the number of associate degrees, diplomas, midwife, and practical nurse staff over the years. However, there's an increase in newly hired nurses in FY2018 and a decrease in nurses resigned/retired/transferred/deceased in FY2021.

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h) Educational Leave and Turnover:

- The number of nurses on educational leave remains minimal, indicating a consistent workforce available for duty. The decrease in the number of nurses resigned/retired/transferred/deceased in FY2021 is positive for staffing stability.

Overall, the data suggests a proactive approach to staff training and development, with an emphasis on advanced cardiac care and increasing qualifications among nursing personnel. Additionally, efforts to manage turnover and maintain staffing levels are evident, contributing to the stability and effectiveness of nursing services at Kwajalein Hospital.

Table 24: Ebeye Hospital Admission Data, FY2018-FY2021

Department	Nursing Bureau Categories	FY2018	FY2019	FY2020	FY2021
Emergency Room	Number seen at ER	1830	2326	1624	1709
	Transfer-ward-admissions	850	1178	774	859
	Number of discharge	974	1141	852	809
	Number of deceased	10	19	21	15
Surgical	Number of admissions	198	256	178	174
	Transfer other ward	15	9	25	14
	Number of discharge	168	132	143	119
	Number of deceased	1	0	0	0
Medical	Number of admissions	330	485	333	413
	Transfer to other wards	27	46	33	57
	Number of discharge	285	274	303	334
	Number of deceased	0	2	0	1
ICU	Number of admissions	72	108	91	127
	Number of discharge	48	69	65	77
	Number of deceased	23	32	26	35
	Number of admissions	13	14	23	1
TB Isolation	transfer other ward	0	0	0	0
	Number of discharge	8	9	19	1
	Number of deceased	0	1	0	0
	Number of admissions	298	366	191	133
Pediatric	Transfer other ward	0	2	0	10
	Number of discharge	280	345	165	113
	Number of deceased	1	1	5	3
	Number of admissions	319	412	327	357
Maternity	transfer other ward	2	4	1	1
	Number of discharge	280	371	285	344
	Number of deceased	3	0	0	0
	Normal Delivery	137	197	142	159
	Cesarian Section	71	69	69	80
	GYNE cases	88	133	84	55
Newborns	Number of admissions	208	256	219	239
	Number of discharge	202	251	215	230
	Number of intrauterine fetal death	2	3	1	1
	Number of neonatal death	0	7	0	2
	Number of abortion	0	5	5	4
	Number of premature	7	9	5	9
High Risk Moms	Number of admissions	35	18	48	68
	Number of discharge	34	17	48	68
	Number of deceased	0	0	0	0
Operating Room	Major Surgery	139	228	90	107
	Minor Surgery	174	326	129	95

Ebeye Hospital's performance from fiscal year 2018 to 2021 reveals several trends and fluctuations across various departments:

a) Emergency Room (ER) KPIs:

- The number of ER visits remained relatively stable, but there were fluctuations in transfer-ward-admissions and discharges.

- There was a decrease in deceased patients from FY2019 to FY2021.

b) Surgical Department KPIs:

- Fluctuations were observed in surgical admissions and discharges, with a decreasing trend in FY2021.

- Transfers to other wards remained stable, and no deaths were reported.

•

c) Medical Department KPIs:

- The number of medical admissions showed an overall increasing trend, with more transfers to other wards.
- Discharges increased over the years, while deceased cases remained low.

d) ICU KPIs:

- ICU admissions increased, along with discharges, indicating effective patient management.
- The number of deceased patients fluctuated but showed a slight increase over the years.

e) Maternity Department KPIs:

- Maternity admissions fluctuated, with minimal transfers to other wards.
- Discharges increased slightly, and deceased cases decreased from FY2018 to FY2021.

f) Newborns KPIs:

- Fluctuations were observed in newborn admissions and discharges, with low numbers of adverse outcomes like intrauterine fetal death and neonatal death.

- g) High Risk Moms KPIs:
 - Admissions of high-risk moms increased over the years, with corresponding increases in discharges and no reported deaths.
- h) Operating Room KPIs:
 - Both major and minor surgeries fluctuated, with a decreasing trend noted in recent years.

Overall, these insights suggest that while there are fluctuations in patient volumes and outcomes across departments, Ebeye Hospital has generally maintained stability and effectiveness in patient care delivery. However, areas with increasing trends, such as ICU admissions and high-risk mom admissions, may require closer attention and resource allocation to ensure optimal patient outcomes. Additionally, the decrease in surgeries performed in recent years may warrant further investigation to address potential underlying causes.

Challenges and Way Forward:

- Collaborate with the Medical Supply Supervisor and the hospital administrator to ensure the sustainable availability of medical supplies, preventing shortages.
- Work closely with the pharmacist to maintain an adequate supply of pharmaceuticals, proactively addressing any potential shortages.
- Coordinate efforts with the Director of Support Services and the HR specialist to facilitate the recruitment of two Marshallese graduate nurses (pending budget approval) and filled vacant positions for graduate nurses who have completed their contracts.
- Collaborate closely with the hospital administrator and medical supply staff to procure pending operating room instruments.

Major accomplishments identified were:

- Successfully completed the Pediatric Advanced Life Support (PALS) Program training for a maternity nurse and a pediatrician in Majuro.
- Expanded the MOHHS workforce by welcoming:
 - a nurse holding a Bachelor of Science in Nursing (BSN) Degree.
 - an associate degree in nursing (ASN) from the College of Marshall Islands (CMI).
 - a BSN expatriates.
 - a midwife.
- Submitted the request for nurses' salary upgrades to Deputy Secretary Glorine.

5.4 Bureau of Oral Health Services

Throughout the years 2018 to 2021, the Bureau of Oral Health within MOHHS has been dedicated to promoting and enhancing oral health standards RMI. The bureau has been at the forefront of initiatives aimed at preventing dental issues, advocating for community oral health awareness, and delivering essential dental care services.

The period witnessed the implementation of various preventive programs, including community dental screenings, fluoride treatments, and educational campaigns to instill good oral hygiene practices.

The challenges faced, such as limited resources and the need for increased outreach, were met with strategic planning and a commitment to community engagement. The Bureau of Oral Health has been a key player in fostering a culture of oral health and wellness, contributing to the overall well-being of the Marshallese population.

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Table 25: RMI Dental Health Services, FY2018-2021

	FY2018	FY2019	FY2020	FY2021
Oral Examinations	3528	2536	2446	1988
Prenatal Check ups	403	192	288	200
NCD	434	369	172	123
Human Services Referrals	98	65	44	54
Fluoride Therapy	451	276	175	111
Sealant	382	262	321	334
Scaling	986	494	466	492
Intermediate Restorative Material (IRM)	401	429	415	345
Glass Ionomer Fillings (GIC)	544	394	389	412
Composite Fillings	900	535	549	536
Amalgam Fillings	593	551	522	553
Pulpotomy	58	44	80	39
Root Canal Therapy	172	148	234	117
Extractions	6963	3933	4207	2268
Partial Dentures	220	216	268	169
Denture In-take & In Process	144	224	199	163
Dentures Done (Full & Partial)	217	237	253	223
Crown & Bridges	21	14	6	4
Wisdom (Surgical removals)	60	32	45	32
Fracture	8	5	9	4
Complications	54	88	110	80
Medication	231	153	231	194
Admissions	49	34	11	12
Medical Clearance/Referrals	131	294	301	319
Emergency On-Call	232	94	41	92
177 Referrals	422	539	668	442
School Students Examine and/or Treated	3118	2859	2321	1700
TOTAL PATIENT ENCOUNTERS	20820	15017	14771	11006

a) Oral Examinations:

- The number of oral examinations decreased steadily from 3,528 in FY2018 to 1,988 in FY2021.
- This decline may indicate various factors such as changes in patient behavior, access to dental services, or resource allocation within the dental health system.

b) Prenatal Check-ups:

- Prenatal check-ups also showed a decreasing trend over the four fiscal years, dropping from 403 in FY2018 to 200 in FY2021.
- This trend suggests potential challenges in providing adequate prenatal dental care to pregnant women, which could have implications for maternal and child health.

c) Non-Communicable Disease (NCD) Services :

- The number of NCD services decreased notably from 434 in FY2018 to 123 in FY2021.
- This decline may reflect changes in healthcare priorities, shifts in patient demographics, or alterations in the prevalence of non-communicable diseases within the population.

d) Dental Treatments:

- Various dental treatments, including fluoride therapy, scaling, fillings, and extractions, showed fluctuations over the four fiscal years.
- While some treatments decreased, others remained relatively stable or showed slight increases, indicating varying demand for different dental services over time.

e) Complications and Medication:

- Reported complications and medication prescriptions fluctuated over the years, with no clear overall trend.
- This variability suggests potential changes in patient health status, treatment outcomes, or healthcare practices within the dental health system.

f) Admissions and Emergency On-Call:

- Admissions and emergency on-call services also exhibited fluctuations across the four fiscal years.
- These fluctuations may reflect changes in patient acuity, emergency care protocols, or resource availability within dental healthcare facilities.

g) School Students Examine and/or Treated:

- The number of school students examined or treated decreased steadily over the four fiscal years.
- This decline could indicate challenges in providing dental services to school-aged children, highlighting potential gaps in school-based dental health programs or outreach efforts.

h) Total Patient Encounters:

- Overall, there was a notable decrease in total patient encounters from 20,820 in FY2018 to 11,006 in FY2021.

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- This significant decline suggests a potential decrease in dental service utilization or availability within the Republic of Marshall Islands over the specified period.

In summary, the analysis highlights trends, and fluctuations in various aspects of dental care delivery over the four fiscal years. These findings can inform healthcare planning, resource allocation, and policy development to address evolving dental health needs within the population.

5.5 Office of Medical Referral Services

The Medical Referral Office has been a cornerstone of MOHHS efforts from 2018 to 2021, ensuring that individuals in RMI receive timely and appropriate medical care beyond the local healthcare capacity. During this period, the office has meticulously coordinated and facilitated medical referrals (See *Annex A: Table 6 Top 5 Reasons for Internal and International RMI referrals - FY2018-FY2021*), demonstrating a commitment to the well-being of Marshallese citizens. Despite logistical challenges and the complexities associated with medical referrals, the office has strived to streamline the process, optimizing communication with relevant healthcare providers and authorities. This has resulted in improved access to specialized medical services for individuals facing complex health conditions. The Medical Referral Office's dedication to addressing the diverse healthcare needs of the population has contributed significantly to the Ministry of Health's overarching mission of providing comprehensive and accessible healthcare services.

Table 26: Basic Referral Data, MOHHS, FY2018-FY2021

Referral Centers	FY2017	FY2018	FY2019	FY2020	FY2021
Honolulu, Guam, US Mainland	2	1	2	2	12
Philippines	129	110	147	0	0
Taiwan	5	5	6	0	0
Japan	0	0	0	0	0
Korea	0	0	0	0	0
Ebeye Hospital	0	0	0	0	0
Total Basic Referrals	136	116	155	2	12
Tripler Hospital (PIHCP)	36	15	12	12	3
Shriners' Hospital	1	1	7	2	0
Total	37	16	19	14	3
Total Referrals	173	132	174	16	15

5.6 Office of Administration, Personnel and Finance

The Office of Administration, Personnel, and Finance is responsible for the daily management of all MOHHS funding, centralized point of procurement and supply, and overseeing the administrative, personnel, and financial functions of the Ministry.

They have also played a crucial role in MOHHS operations from 2018 to 2021. Over these years, the office has been instrumental in managing financial resources, budget allocations, and administrative functions to ensure the smooth functioning of health programs and services.

Through meticulous financial planning, the office has helped optimize the utilization of funds, ensuring that resources are allocated effectively across various health initiatives. Additionally, the Office of Administration and Finance has been pivotal in enhancing transparency and accountability in financial matters, fostering a culture of responsible resource management within the ministry.

Despite challenges, such as changing economic landscapes and evolving healthcare needs, the office has demonstrated resilience and adaptability in supporting the overarching goals of the Ministry of Health. Their efforts have significantly contributed to the ministry's ability to provide essential healthcare services to the people of the Republic of the Marshall Islands.

5.6.1 Healthcare Workforce

Figure 44: Ministry of Health and Human Services Staff celebrating Dri-Jerbal Day (Labor Day)



The *Hippocratic Oath* of the Marshallese Doctors

The *Hippocratic Oath* is a historic pledge traditionally taken by physicians and other healthcare professionals upon entering the medical profession. It is attributed to Hippocrates, a prominent ancient Greek physician often referred to as the "Father of Medicine," although its authorship and origin are not definitively established.

The oath outlines ethical principles and guidelines for medical practitioners, emphasizing the importance of patient well-being, confidentiality, and the moral obligations of the physician. While there are various versions of the Hippocratic Oath, a common theme is the commitment to do no harm, uphold patient confidentiality, and maintain a high standard of ethical behavior in the practice of medicine.

Figure 45: Dr Cody Jack swearing in as a physician, The *Hippocratic Oath*



For Dr Cody Jack, wrote a poem (see Annex B) recall taking the *Hippocratic Oath* was a monumental occasion. Below ia a few things he wrote:

1. That I have people's lives in my hand, a very heavy burden indeed. People willingly come to me in their time of need and if I do not do my job right or investigate the pertinent issues, that person will, at best, have no improvement to their illnesses and, at worst, die.
2. Doctors are not gods who can bring back the dying to the living world. We are merely guides who guide the willing and able to a better state of health. And if a patient is beyond the reach of modern medicine, a doctor then becomes a close friend that guides the patient and family to acceptance.
3. The foundation of my ability to provide services to my patients is myself, therefore I must be healthy and maintain healthful habits. It is my wishful thinking that I may impart not just my medicines and treatments to my patients, but also a part of my way of life that they may live healthier lives as well.

Figure 46: Hippocratic Oath of Dr Kyle Lemari, Dr. Francis Hicking and Dr. Annie Chong Gum



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Figure 47: Hippocratic Oath of Dr. Veronica Ysawa



Figure 48: Hippocratic Oath of Dr. Hendy Enos



Figure 49: Hippocratic Oath of Dr. Ethel Briand



Figure 50: Hippocratic Oath of Nurse Practitioners



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Figure 51: Hippocratic Oath of Nurse Practitioners Second photo



Figure 53: New MOHHS Health Assistants



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16 new MOHHS Marshallese HAs who will be serving to the population in the outer islands. They are pictured here with HE President Kabua and First Lady Ginger (both seated on the right), Minister Bruce Bilimon and wife Bonita, and President of the Mayor's Association, Joe Hanchor, and Rev. Russell Edwards. The names of the graduates are: Jally Enos, Joe Latdrik, Carlson Joel, Hammond Langbata, Joel Laiden, Nijjab Antolok, Liji John, Joe Noka, Willy Namdrik, Janer Jally, Jason Lang, Tom Briand, Frabrica Enos, Boujla Enos, Merryanna Enos and Rodney Paul.

Table 27: RMI FY2021 Summary of Medical Staff by Type, Gender, and Location

Summary of Medical Staff by Type, Gender, and Location, RMI, FY2021																		
Location	Majuro Hospital			Majuro Primary Health Care			Kwajalein Memorial Hospital			Outer Island Health Center			177 Health Center			Private Clinic		
Type	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Physicians	13	10	23	3	3	6	6	3	9	1	0	0	7	0	7	1	0	1
Medical Assistant	1	0	1	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0
Health Assistant	0	3	3	0	0	0	1	1	2	45	9	54	7	2	9	0	0	0
Nurse Anesthetist	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Dentists	2	2	4	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0
Source: Human Resources for Health Department; Legend: M – Male, F – Female, T – Total																		

Medical Providers by Type, Gender, and Location, RMI, FY2021																								
Location	Majuro Hospital			Majuro Primary Health Care			Kwajalein Memorial Hospital			Outer Island Health Center			177 Health Center			DOE Clinic			Private Clinics			Total		
Type	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
General Physician	1	1	2	2	1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	2	5
Family Medicine	4	2	6	0	0	0	0	0	0	0	0	0	7	0	7	1	0	1	1	0	1	13	2	15
Pediatrician	1	1	2	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5
OB-Gynecologist	0	3	3	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5
Ophthalmologist	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Pathologist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiologist	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Orthopedic Surgeon	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Psychiatrist	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Internist	1	3	4	0	1	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7
General Surgeon	3	0	3	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Anesthesiologist	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Optometrist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1
Medical Assistant	1	0	1	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Health Assistant	0	0	0	0	0	0	1	1	2	45	9	54	7	2	9	0	0	0	0	0	0	53	12	65
Nurse Anesthetist	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Dentists	2	2	4	0	0	0	1	1	2	0	0	0	0	0	0	0	0	1	0	1	4	3	7	7
	18	12	30	5	3	8	10	5	15	45	9	54	14	2	16	1	0	1	2	1	3	95	32	127
Source: Human Resources for MOHH; Legend: M – Male, F – Female, T – Total																								

Figure 54: Customer Training Provided by Marshall Islands Resort



The Marshall Islands Resort conducted 2 sessions of customer engagement training with the staff of MOHHS to improve our customer service.

5.7 Office of Health Planning, Policy, Preparedness, and Epidemiology

Office of Health Planning, Policy, Preparedness, and Epidemiology is responsible for collecting, analysis, and monitoring of health indicators, processing of birth and death certificates, preparations of MOHH Annual Report, Strategic Plans, and other reports, and responsible for the MOHHS network and Information System, Performance Management, Epidemiology, Health Preparedness Program & Performance Management.

5.7.1 Preparedness

RMI Joint External Evaluation

From the 22 to 26 September 2019 in Majuro, a team of global public health experts joined forces with MOHHS and RMI national authorities and partners to review and evaluate the RMI's health emergency preparedness through the Joint External Evaluation (JEE) process. Developed by WHO, Member States and partners, the process was created to help countries evaluate their core capacities under the International Health Regulations (IHR (2005)).



The International Health Regulations (2005) (IHR) are the legal framework for global health security with all State Parties required to develop minimum core capacities to detect, prevent and respond to public health events and emergencies. The Joint External Evaluation (JEE) is one of the four components of the updated IHR (2005) monitoring and evaluation framework, along with mandatory annual reporting, after action reviews (AARs), and simulation exercises. The JEE provides a unique, voluntary opportunity for multi-sectoral teamwork within a country, supported by international partners, to assess IHR implementation. It promotes transparency, mutual accountability, international collaboration, and confidence.

The national team reports showed RMI's great commitment to strengthening the health security system as well as to the JEE process. The JEE team found many strengths in the RMI, particularly:

- Excellent coordination and collaboration within the Ministry of Health and Human Services (MOHHS) and between sectors, with a cohesive and resilient workforce that can recognize when to utilize existing international partnerships to supplement country response capacities.
- A well-established national emergency preparedness and response system that uses the incident command structure and encompasses all sectors.
- A workforce committed to quality improvement and assurance.
- A dedicated multi-disciplinary Exposure Prevention Information Network Surveillance System (EPINet) team with the flexibility to manage concurrent events and reallocate human resources to take on the functions of the incident command structure as required.
- Innovation to address issues by utilizing adaptive approaches that are proportionate to risk and inclusive of the outer islands.
- A strong surveillance system with the capacity to collect, collate and report surveillance data within the country and to external partners
- The existing quest for improvement in the health security system as evidenced by recent actions, such as establishing an environmental health unit and the Health Security Taskforce.

The overarching recommendations of the JEE team were to:



- Complete a comprehensive national multi-hazard risk assessment to prioritize emergency preparedness planning and map resources appropriately.
- Incorporate new legislation and revisions into a comprehensive and practical multi-sectoral legislative strategy for implementation.
- Consolidate, finalize, approve, and validate all IHR-related documents that underpin the health security

system, including cross sector coordination arrangements.

- Encourage the incorporation of key JEE recommended actions into multi-sectoral planning and budgeting cycles.
- Develop and implement comprehensive national human resources plan to recruit, retain and develop health personnel to implement, sustain and advance activities to comply with IHR provisions.
- Strengthen emergency administrative procedures, e.g. for risk communication, procurement and financing, and review periodically.

5.8 Health Informatics Department

5.8.1 Health Planning

COVID-19 Table-Top Exercise - Majuro

MOHHS joined the RMI National COVID-19 Tabletop Exercise (TTX) that took place from August 12-14, 2020. The 3-Day event was supported by the International Organization for Migration (IOM) and World Health Organization (WHO) in close collaboration with the National Disaster Management Office (NDMO) under the Office of the Chief Secretary (OCS). The event was attended by 296 participants and was opened by President David Kabua with dignitaries Nitijela Parliament members and Kwajalein Emergency Operations Center (KEOC) were in attendance.

The event started off with a two-day TTX discussion which provided scenarios, discussion-based sessions on the preparedness and response mechanisms in relation to the repatriation of citizens in a COVID-19 context for various health, emergency, disaster response organizations, working groups and national clusters.



On the third day, a full-scale exercise (FSE) or simulation exercise (SimEx) took place with actors running through a repatriation scenario from Points of Entry-Airport to designated quarantine center, in this case, Arrak Quarantine site. The scenario involved two of the passengers on board developing possible signs of the virus which triggered the need for testing through the RMI MoHHS hotline as well as contact tracing at a local business. Following the FSE, a two-hour hotwash or debriefing session took place with all participants

and evaluators. The key outcomes were shared with the National Disaster Committee (NDC) included the following:

- A need for continued outreach, inclusion and practices with other key stakeholders such as traditional leadership and the private sector.
- Improve internal communications and decision-making.
- Hold additional simulations and practices at targeted areas to ensure everyone who may need to be part of a repatriation is fully trained and confident in their relevant policies and procedures.
- Ensure basic baseline supplies and prepositioned items are fully in place and readily available.

Give increased attention to inclusivity and gender-sensitive preparations and response in Standard Operating Procedures and policies.

5.8.2 Climate Change

Addressing Climate Change and Health Head-on

Following emergency declaration in 2019, Climate Change is a top national concern for all levels of the RMI government (source). The MOHHS has therefore initiated several novel efforts to address both the short and long-term threats climate change poses to the people and islands of the RMI. Steps taken over the past years to fight climate change include:

- Establishing a new department under the Office of Health Planning, Policy, Preparedness, and Epidemiology to focus exclusively on the intersections of climate change and public health, overseen by the Climate Change and Health Coordinator.

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- Hosting the first National Climate Change and Health Dialog & Stakeholder Mapping Workshops to provide space for community voices and RMI's rich history of traditional knowledge.
- Partnering with community organizations like Jo-Jikum to lead youth-focused climate change and health art camp series.
- In support of the RMI's overall commitment to a carbon-neutral economy by 2030 working with the Okeanos foundation to provide carbon-free travel to Outer Island communities.



Figure 55: Climate Change and Health Policy and Action Plan Stakeholder Mapping Workshop, July 27 and July 29, 2020, Lomalo, MIR



Secretary of MOHHS, Jack Niedenthal, joins the students in the opening of Climate Change in Health Arts Seminar from July 20 through to July 31, 2020 at the College of Marshall Islands (CMI) Campus organized by Jo-Jikum and supported by MOHHS, The Global Climate Change Alliance Plus Initiative (GCCA+) Scaling Up Pacific Adaptation (SUPA) Grant and WHO.

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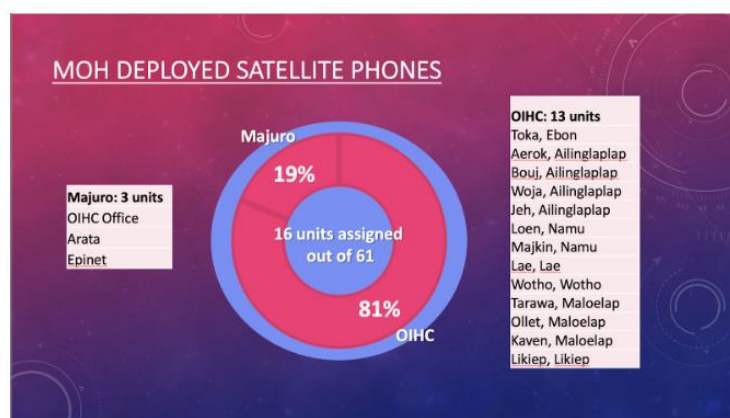
Figure 56: Climate Change in Health Arts Seminar, CMI Campus, July 20-July31, 2020



5.8.3 Information Technology

Majuro IT Troubleshooting Request

	FY2020	FY2021
No. of troubleshooting ticket request	1358	1507
No. of troubleshooting ticket served successfully	1328	1491
No. of pending at the end of the month	30	16
% completion	98%	99%



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UNIWeb PACS Training with the IT Department and Nurse Practitioners



The integration of the old Patient Registration system with the new mHIS Patient Registration platform has been successfully completed. Additionally, efforts have been made to continuously update the Patient Registration Module, focusing on addressing design issues, building maintenance tables, and enhancing the face sheet. During the registration process, duplicates have been identified and cleaned up, and demographic information has been updated accordingly.

Furthermore, the mHIS Patient Registration system has been linked with the TB & Leprosy Mass Screening Database for improved data management. A Reception Module has been implemented to facilitate patient appointments in both Outpatient and Public Health Clinics. Lastly, data entry for Outpatient, Public Health, and Emergency Room encounters, which had been pending due to the implementation of the new system. This has been addressed and completed.



5.8.4 Epidemiology

5.8.4.1 Surveillance

- COVID-19 (SARS CoV-2) and Influenza-Like Illness Surveillance

In response to the worldwide COVID-19 pandemic, RMI closed its borders to incoming travelers in February 2020. The Safe Travels Program permitted entry for individuals meeting vaccination and negative test requirements. However, a mandatory quarantine of at least 10 days in Government of the RMI (GRMI) facilities was still enforced, with additional negative testing conducted.

Active surveillance for suspected COVID-19 cases and Influenza-Like Illness (ILI) symptoms continued through daily review of electronic encounter diagnoses in Majuro and Ebeye clinics.

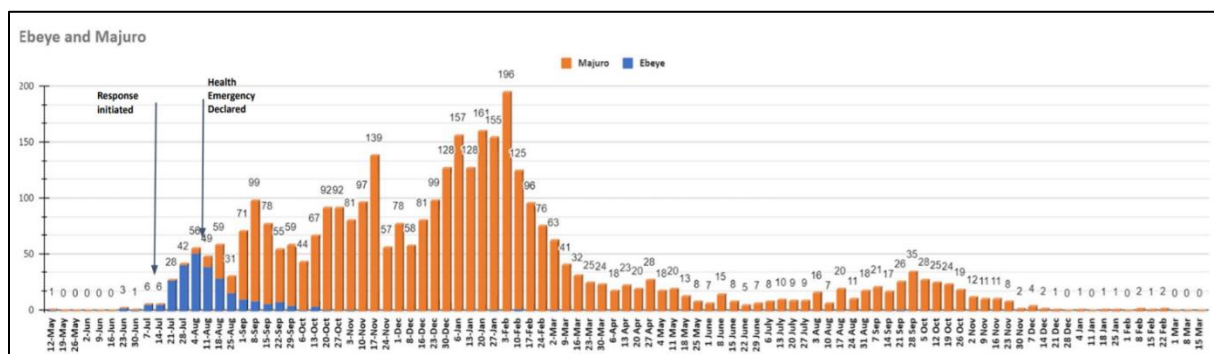
Syndromic surveillance also monitors reports for ILI to capture respiratory illnesses observed within clinical settings. The policy for Majuro and Ebeye clinics is to collect nasopharyngeal or anterior nasal specimens from patients exhibiting significant respiratory symptoms for influenza and COVID-19 viruses. Any person hospitalized in the Intensive Care Unit for serious respiratory illness is tested for ILI or COVID-19 and reported for Severe Acute Respiratory Infection (SARI) syndrome.

Enhanced surveillance was implemented through screening and testing among symptomatic community members. Additionally, individuals leaving RMI were required to provide proof of a negative COVID-19 or Antigen test, as mandated by some countries.

- Dengue Outbreak Response

The year 2019, RMI saw the worst outbreak of dengue-like illness recorded in history. Similar outbreaks of dengue serotype 3 spread rapidly in neighboring Pacific Island countries in the preceding weeks. Cases in the RMI emerged first in Ebeye, then spread throughout 13 atolls. Most cases occurred throughout Majuro atoll, with low levels of on-going transmission recorded. From May 2019 to March 2021, there are total of 3,842 dengue cases with 1,236 hospitalizations, and 2 deaths.

Figure 57: Epi-curve of Dengue cases during the outbreak in RMI from May 2019 to March 2021



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Figure 58: Dengue Fever Outbreak Map, May 2019 to March 2021, RMI



MOHHS emergency responses to the outbreak followed a three-part strategy: 1) reducing vector (mosquitoes) populations by removing potential breeding sites and spraying insecticides, 2) limiting local and inter-island transmission, and 3) informing the public of strategies for preventing mosquito-borne illnesses like dengue.

On-going cases of dengue in Majuro point to the compounding threats posed by climate change-related hazards, high background rates of pre-existing comorbidities (e.g., diabetes), and limited healthcare resources to address complex problems.

Figure 59: Examples of public health flyers on dengue fever in English and Marshallese.

Emerging Diseases and Outbreak Responses

- Dengue-3 Outbreak (June 25, 2019 – August 2021) – Outbreak Overview

In May of 2019, an initial case of Dengue fever was identified on Ebeye, later spread to 12 atolls. Majuro became the hotspot for on-going cases, accounting for 87.6% of all dengue-like illness cases. As of February 2021, 3,884 dengue-like illnesses were recorded across the RMI, of which 1,987 have been lab confirmed. Two deaths occurred and one severe dengue patient evacuated out-of-country for further treatment.

DENGUE FEVER

The 3S of Dengue Prevention

Search & Eliminate

Discard old tires.
Cut and rake yards as well as bushy areas. Fill in puddles or crab holes.
Pick up empty coconut shells, empty bottles, and cans. Discard the trash properly.

Empty canoes and boats that contain water, then turn them upside-down to avoid catching water.

Empty wash containers & pet dishes daily and change water in flower vases once a week.

Clean out & tightly cover water collection tanks.

Self-Protection Measures

Use screens on doors and windows.

Use insect repellent on exposed skin in areas where mosquitoes are detected. Re-apply repellent as needed following product use instructions.

Wear long sleeves, pants, socks, and shoes especially in areas where mosquitoes are detected or while cleaning around the house.

COMMON SYMPTOMS

Sudden High Fever / Severe Headache & Backache
/ Chills / Body Ache / Joint & Muscle Pain / Pain When Moving Your Eyes / Loss of Appetite / Vomiting / Rash

Seek Early Consultation

If you or a family member has a fever that lasts two days or longer and rashes on the skin, consult a physician/doctor or visit Majuro Hospital in Delap to test for Dengue fever.

Severe cases of Dengue Fever can result in Dengue Hemorrhagic Fever, Dengue Shock Syndrome, and even death. Those with weakened immune systems – young children, the elderly, or those who suffer from chronic disease—as well as those who have been infected with Dengue in the past, are more at risk for severe Dengue.

Avoid taking Aspirin, Motrin, or Ibuprofen if you think you may have Dengue Fever. If you are currently on a medication regimen that requires taking Aspirin, consult with a physician/doctor as soon as you exhibit symptoms of Dengue Fever.

If you are tested positive for Dengue Fever, serious complications can develop. Consulting with a physician/doctor and recognizing Dengue Fever early can save your life.

For further information, please contact the following person:

MAJURO HOSPITAL Dr. Tom Jack 456-0964 Dr. Ama Gustang 455-4031 ER: 625-4144	EBEYE HOSPITAL 329-8029/8030 Dr. Joaquin Nasa 235-4503 Gloria Jeaduk 329-8206	OUTER ISLANDS 625-4541 Arata Nutham 455-5817
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DENGUE PIBA

Bunton ko nan bobrae jen naninmej in dengue

Jolok aolep men ko renaj kaal nam einwot:

Jolok neen wa ko.
Kuroo im jolok aolep men ko renaj etein kin dren ipelakin mwot.

Jolok aolep men ko renaj etein kin dren einwot; lat, bato ko, kowat, im ko me remanen etein kin dren.

Lutok lok wa ko rej etein kin dren einwot; loon, kokor, wa kilip ko.

Kalubu nien dren in idrak ko.

Pinej mejen nien dren ko kon ok.

Kejparok jen naninmej in dengue piba

Kejparok ok non kojem in winro ko.
Ekonak airok pa im airok ne jedojj im kejparok teunak ko.

Kejparok kein konanmam ko einwot burrik im kein ekakit ko.

KAROLKOL KO EKKE AER WALOK

Piba en Baa / Metak, Bar am Daa / Baa / Metak, Eabwin / Metak-Matoy / Metak Iowaa May / Jolok, Mosa / Enojok / Nansap

Jipadok jikin takto ilo ien eo emokaj tata

Ne kwe ak ro uaa paamle eo ej piba unun roo rain loniak, im ewor kokale kein bo kaki, jout im jipadok jikin takto.

Naninmej in dengue piba elap an kawotata elane enaj drool lok jen jonan eo. Ekawotata non aji jidrik ro, rito ro, im ro me rej mour kon naninmej in tonal, kanjer, high blood, HIV, im ko eerok wea. Elapeta ro me emoj aer lok naninmej in dengue jion alea.

Ne ewor am naninmej in dengue piba, jab idrak uno kein einwot Aspirin, Motrin, ak Ibuprofen. Ne koj idrak Aspirin ekkar non takto eo am ilo ien eo ewor kokale kein apam, jout im leliaak takto eo am.

Elane ewor naninmej in dengue piba emaron kawotata non ejnour eo am. Ne emokaj am jipadok takto emaron mokaj aer jipan eek.

Nan melele ko relap lok jout im kirok:

MAJURO HOSPITAL Dr. Tom Jack 456-0964 Dr. Ama Gustang 455-4031 ER: 625-4144	EBEYE HOSPITAL 329-8029/8030 Dr. Joaquin Nasa 235-4503 Gloria Jeaduk 329-8206	OUTER ISLANDS 625-4541 Arata Nutham 455-5817
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Emergency Response

The EpiNet team was activated on July 16, 2019, to coordinate emergency outbreak response following a Presidential Declaration of Health Emergency. Subsequently, inter-atoll travel was limited to curb the spread of infectious diseases. The Health Declaration was reactivated in October 2020 following a peak in cases in Majuro.

Vector-control activities, such as widespread fumigation (spraying insecticides), promotion of daily use of mosquito repellent, distribution of bed nets, and removal of waste and standing water where dengue-carrying mosquitoes breed, were implemented. Additionally, measures such as restricting inter-island travel, deploying chemical treatments, distributing mosquito-repelling materials, and raising awareness were undertaken. The MOHHS utilized various communication channels including radio, text messages, newsprint, and social media posts to inform the public about the evolving situation and encourage community participation in vector-control activities, such as removing standing water around homes. Despite these efforts, low-level transmission persisted in select areas of Majuro into 2020 and 2021, while no new cases were reported in the Outer Islands.

Contributing factors to the severity and duration of the outbreak likely include climate change, high rates of comorbid vulnerabilities such as diabetes, and a complex-built environment conducive to the proliferation of dengue-carrying mosquitoes.

- **Rotavirus and Diarrheal Outbreak (March – April 2019)**

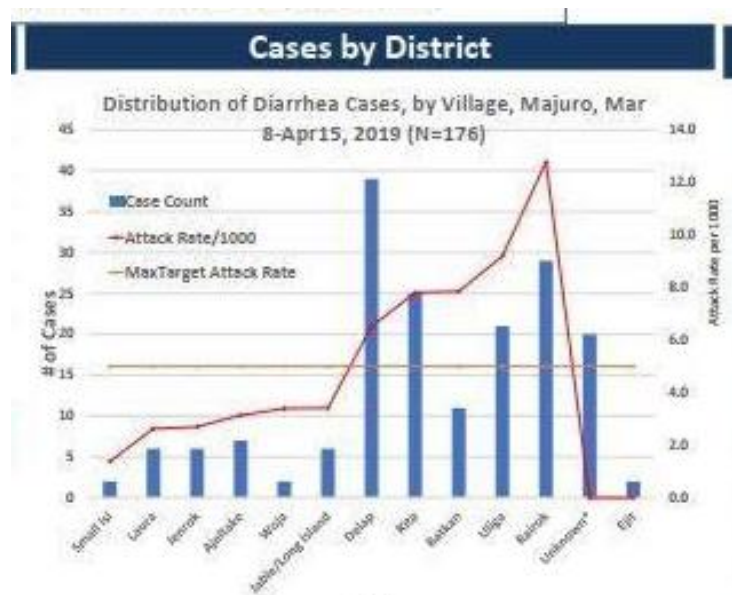
Syndromic surveillance identified an increase in cases of diarrhea in Majuro atoll beginning March 11th-17th 2019. Rapid testing showed evidence of rotavirus (69.4% of cases tested), further supported by the age-specific burden of the outbreak that follows common patterns of infection among children under 5 (64% of cases). A total of 176 cases were identified by April 19th, 2019, with geographic concentrations in the Delap-Uliga-Djarrot (Rita) (DUD) downtown area as well as in nearby Rairok. 29 cases required hospitalization for rehydration and no deaths occurred.

The MOHHS EpiNet team took immediate steps to limit the severity of the outbreak including consistent health messaging on hand hygiene in newsprint and radio. This outbreak underscores the importance of furthering current infant vaccination efforts. Although vaccinations against rotavirus were introduced in the RMI in 2009, among the cases involved in this outbreak under 5, just over half (51.5%) received at least one dose.

5.8.4.2 Kwajalein Surveillance Unit

Kwajalein Syndromic Surveillance

Daily Syndromic surveillance rounds and reporting conducted by the Surveillance Specialist vetted by the Director Medical Public Health and the In-House Epidemiologist before submission to the National Surveillance and Epidemiology for Weekly reporting to our stakeholders.



Disease Investigation and Monitoring of National Notifiable Disease List (NNDL)

Disease Investigation is conducted on a needed basis by the Public Health Team once the Surveillance Specialist and the Medical Director confirmed the situation of interest that needs to be investigated. Continuous monitoring of the National Notifiable Disease with collaboration with the Medical Officers also Daily.

5.9 Vital Statistics

The Vital Statistics Office operates under the Office of Health Planning, Policy, Preparedness, Personnel, and Epidemiology. MOHHS is responsible for recording births and deaths in health facilities and communities, while the collation of these records at the national level is undertaken by the Vital Statistics Office. This office is governed by the RMI Birth, Death, and Marriage Registration Acts of 1998, under the Marshall Islands Revised Code (amendment) Act of 2016.

This section provides statistics pertaining to births recorded by the RMI MOHHS for babies born from FY2017 through to FY2021; and deaths recorded by the MOHHS for deaths that occurred during 2018-21. The population denominators applied for estimation of different indicators are derived from the RMI Population Census for 2011, and for 2021.

5.9.1 Births

The average number of births from 2018-2021 is around 997. Using this data, the calculated annual crude birth rates during 2018-21 remained relatively stable between 18-19 births per 1,000 population, before decreasing to 17 per 1000 in 2021. The overall fertility pattern across 2018-21 indicated a gradual decrease in the crude birth rate.

Table 29: Birth Summary, MOHHS, FY2017-FY2021

Description	FY2017	FY2018	FY2019	FY2020	FY2021
Registered Birth	1,024	986	1,021	1,023	958
Crude Birth Rate Per 1,000 Live births	18	18	18	19	17
Total Fertility Rate	2.59	1.14	1.18	1.15	1.15
Rate of Natural Increase	1.26%	1.23%	1.22%	1.25%	1.25%
Low Birth Weight (LBW)	130	92	133	98	96
LBW (Incidence among newborns)	13%	9%	13%	10%	10%
Very LBW	14	4	7	14	5
Premature	104	100	77	83	100
Teen Pregnancy (<15 years old)	0	1	0	2	5
Teen Pregnancy (15 to 19 years Old)	144	149	148	157	143
Percentage of Teen Pregnancy (15 to 19 years old) from All Birth	14%	15%	14%	15%	15%
Teen Pregnancy Rate Per 1,000 Population	61	63	63	66	62

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Table 30: Birth Attendant per Location, MOHHS, FY2017-FY2021

Attendant	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	Majuro	Kwajalein	Outer Islands	Total	Majuro	Kwajalein	Outer Islands	Total	Majuro	Kwajalein	Outer Islands	Total	Majuro	Kwajalein	Outer Islands	Total	Majuro	Kwajalein	Outer Islands	Total
Nurse or Midwife	560	130	0	690	443	162	6	611	506	164	13	683	496	158	4	658	488	154	6	648
Health Assistant	1	17	105	123	0	8	54	62	2	7	42	51	2	15	42	59	0	9	26	35
Medical Assistant	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Doctor	92	95	4	191	102	124	2	228	122	96	2	220	194	98	0	292	162	100	0	262
Nurse Practitioner	0	0	0	0	67	0	0	67	39	0	0	39	0	0	0	0	0	0	0	0
Others (Self/Relatives)	2	1	0	3	2	0	0	2	12	0	0	12	4	0	0	4	8	0	1	9
Traditional Birth Attendant (TBA)	0	0	6	6	1	0	8	9	0	0	0	0	0	0	3	3	0	0	1	1
Not Stated	9	0	1	10	6	0	0	6	14	0	2	16	10	1	1	12	2	1	0	3
Total	665	243	116	1024	622	294	70	986	695	267	59	1021	706	272	50	1028	660	264	34	958

5.9.2 Deaths

Based on meticulous data analysis, the Vital Statistics department has identified and quantified the top 10 causes of mortality (see *Annex A: Table 1*) within the RMI population, providing vital statistical insights that inform strategic public health initiatives, key challenges, and interventions for the well-being of our community.

Table 31: Summary of Deaths, MOHHS, FY2017-FY2021

Description	FY2017	FY2018	FY2019	FY2020	FY2021
Registered Death	325	318	312	336	291
Crude Death	6	6	6	6	5
Infant Death	20	9	21	21	16
Fetal Death (Still Birth)	14	7	12	11	13
Early Neonatal Death	6	7	11	9	15
Neonatal Death	8	8	12	10	14
Post Neonatal Death	12	1	9	11	2
Perinatal Death	20	14	23	20	28
Under 5 deaths	28	16	18	26	24
Maternal Death	0	3	4	2	3

Figure 60: RMI Adult Mortality Rate of Diabetes per 100,000 for individuals 30 years to 69 years of age, FY2017-FY2021

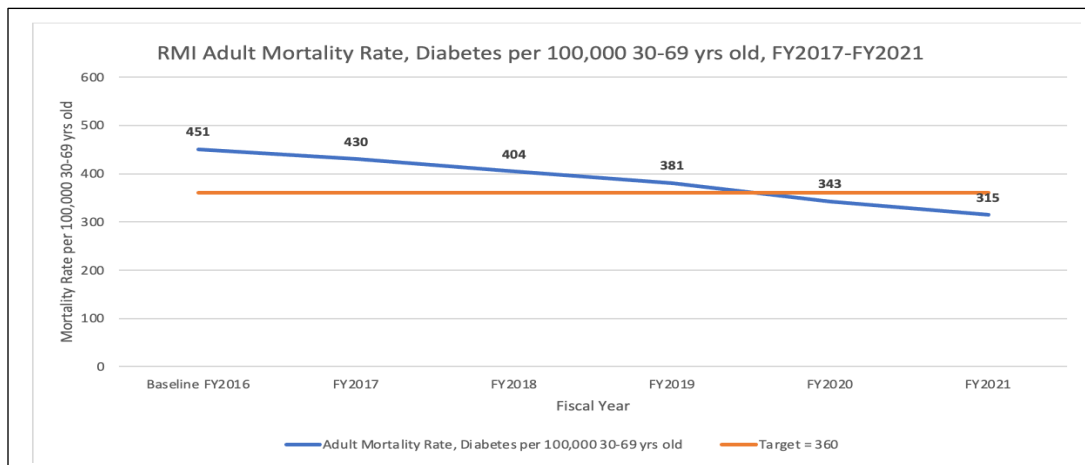


Figure 61: RMI Adult Mortality Rate of Cardiovascular per 100,000 for individuals 30 years to 69 years of age, FY2017-FY2021

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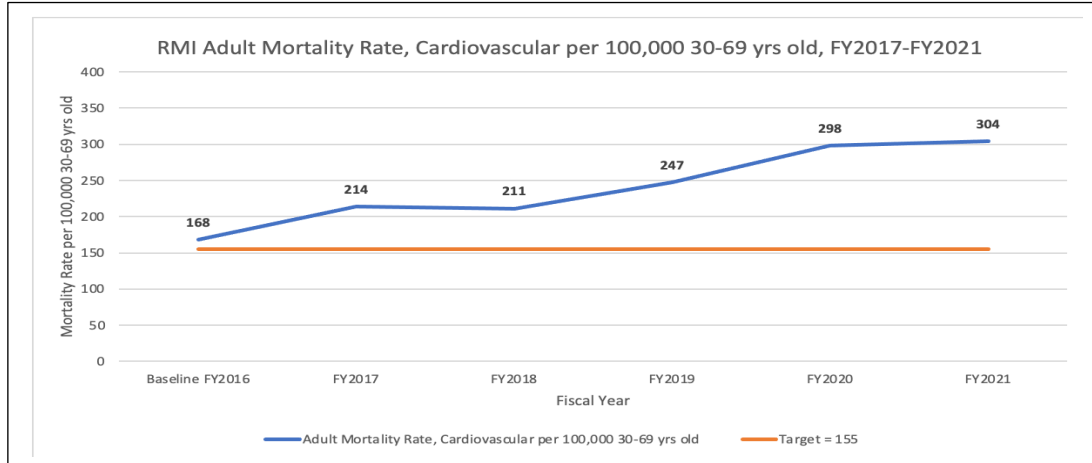


Figure 62: RMI Adult Mortality Rate of Chronic Lung Disease per 100,000 for individuals 30 years to 69 years of age, FY2017-2021

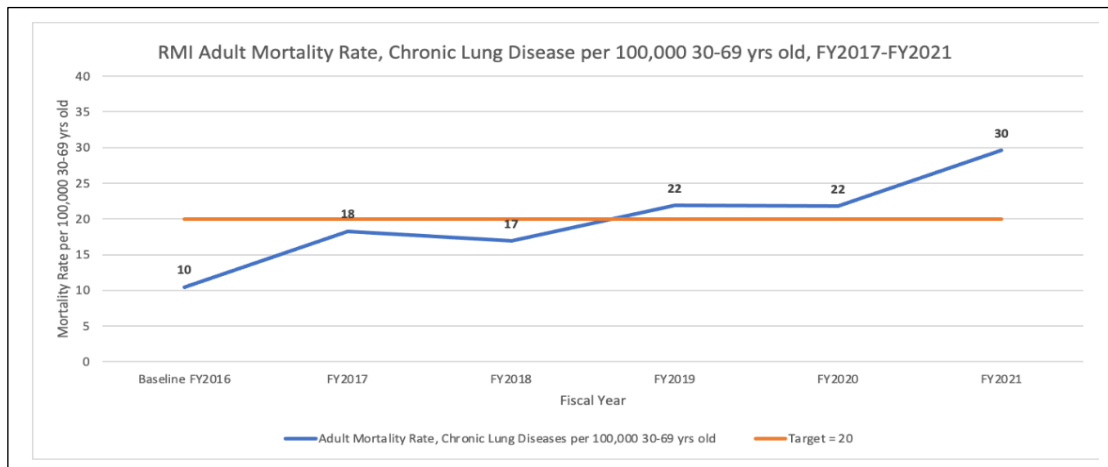
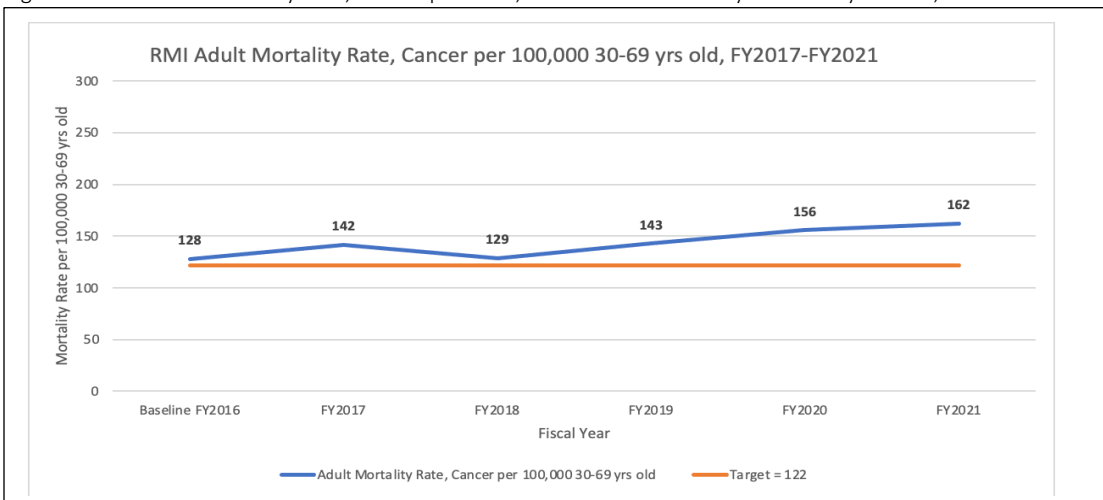
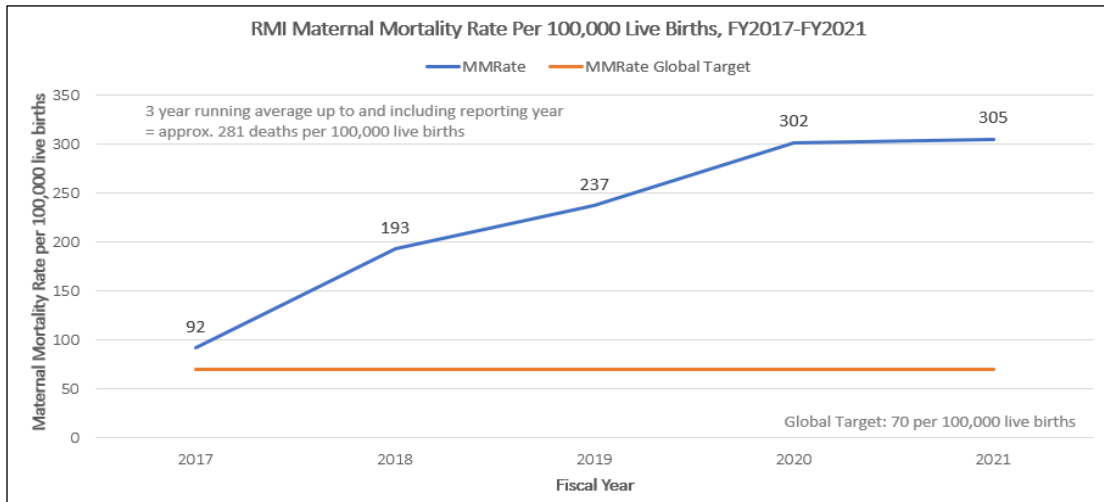


Figure 63: RMI Adult Mortality Rate, Cancer peer 100,000 for individual's 30years to 69 years old, FY2017-FY2021



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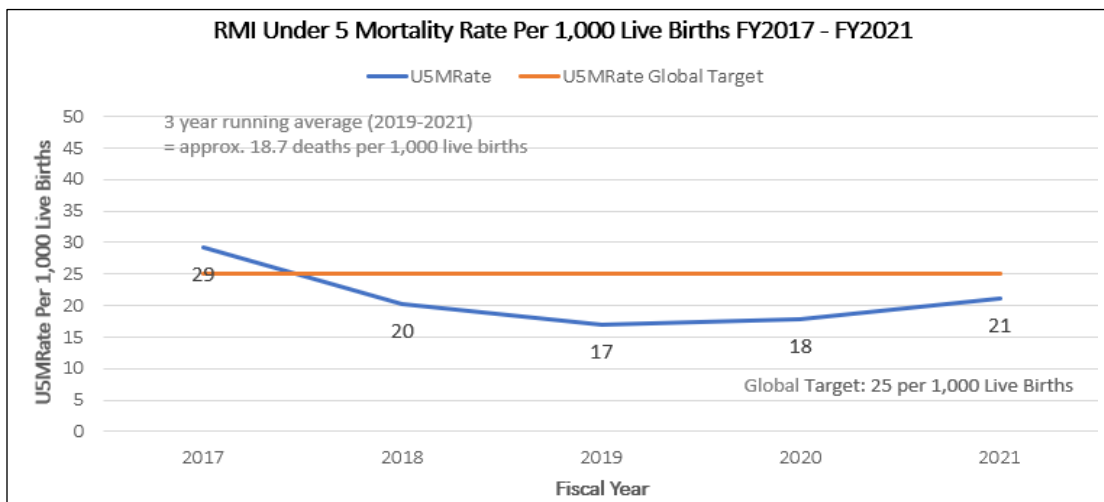
Figure 64: RMI Maternal Mortality Rate, FY2017-2021



The Maternal Mortality Rate (MMRate) in the RMI seen in Figure 64 shows an increasing trend over the five-year period. It rises from 92 deaths per 100,000 live births in 2017 to 305 deaths per 100,000 live births in 2021. This indicates a concerning trend of worsening maternal health outcomes over the years. The global target for MMRate is set at 70 deaths per 100,000 live births for each year from 2017 to 2021. However, the MMRate in RMI consistently exceeds this target in all five years. This suggests that the country is falling short of achieving the desired level of maternal health outcomes set by global targets.

The data indicates a concerning trend of increasing MMRate in RMI, with MMRate consistently exceeding the global target of 70 deaths per 100,000 live births. Addressing this gap requires concerted efforts to strengthen maternal healthcare systems, improve access to quality care, and address underlying social determinants of health affecting maternal outcomes.

Figure 65: RMI Under 5 Mortality Rate per 1,000 Live Births, FY2017-2021

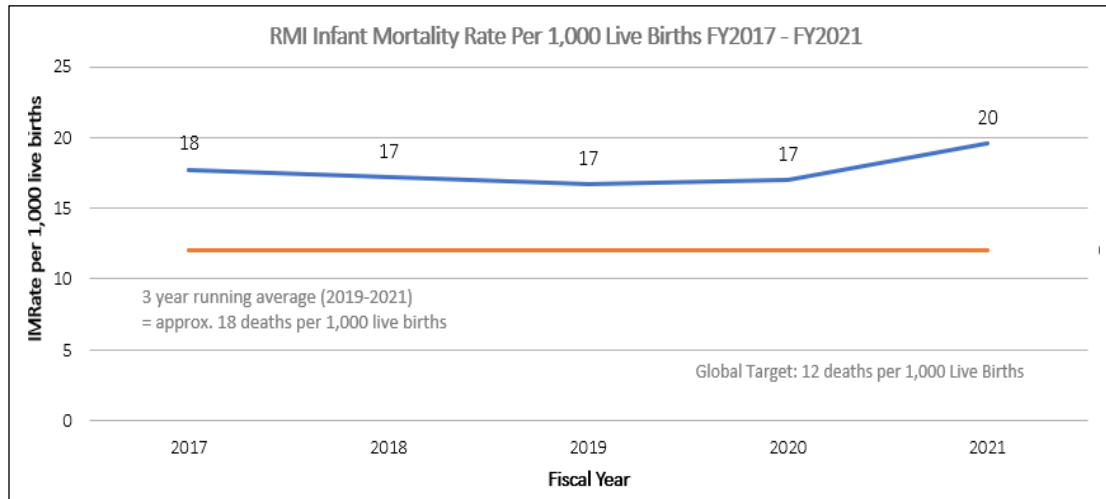


The Under 5 years old Mortality Rate (U5MRate) in RMI fluctuates slightly over the five-year period but generally remains relatively low. It ranges from 17 deaths per 1,000 live births in 2019 to 29 deaths per 1,000 live births in 2017. This suggests some variability in child mortality rates over time. The global target for U5MRate is set at 25 deaths per 1,000 live births for each year from 2017 to 2021. The U5MRate in RMI consistently meets or falls below this target in all five years. This indicates that the MOHHS is achieving or exceeding the desired level of child health outcomes set by global targets.

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This suggests that efforts to improve child health and reduce U5MRate in the country have been effective, although there may still be room for further improvement. Overall, the data indicates that while MOHHS has made progress in reducing U5MRates and is generally meeting global targets, continued efforts are needed to sustain and build upon these achievements to ensure the well-being of children in the country.

Figure 66: RMI Infant Mortality Rate Per 1,000 Live Births FY2017 - FY2021



The Infant Mortality Rate (IMRate) in RMI remains relatively stable over the five-year period, with minor fluctuations. It ranges from 17 deaths per 1,000 live births in 2018, 2019, and 2020 to 20 deaths per 1,000 live births in 2021. This suggests a generally consistent level of infant mortality in the country over the years. The global target for the IMRate is set at 12 deaths per 1,000 live births for each year from 2017 to 2021. The IMRate in RMI consistently exceeds this target in all five years. This indicates that there is much needed effort in achieving the desired level of infant health outcomes set by global targets.



ICD-10 Training and Medical Certification of Cause of Death from October 14 to 25, 2019

6. BUDGET OVERVIEW

This section will provide a brief narration of the ministry's budget, detailing the allocation of funds across various outcome areas, funding sources for different programs, and budget variations.

For Fiscal Year 2021, the seven (7) primary health service programs detailed below benefited from allocated funding, with each amount summarized as a percentage (see *Table 32*).

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Table 32: FY2021 Budget Allocation by Outcome Areas

FY2021 Budget Allocation by Outcome Areas		
Outcome Areas	Allocated Funds	Percentage
Primary Health Care	7,546,577	25%
Majuro Atoll Health Care Services	8,435,675	28%
Kwajalein Health Care Services	5,836,505	19%
Administration, Personnel, & Finance	2,322,174	8%
Office of Health Planning, Policy, & Epidemiology	1,810,786	6%
Referral Program	4,047,516	13%
Dental Services	632,685	2%
Total	30,631,918	100%

For Fiscal Year 2021, funding for all primary health service programs was sourced from 10 separate health fund entities as depicted in Table 33 below. The total funds disbursed and utilized amounted to \$30,631,918.

Table 33: FY2021 Budget Allocation by Funding Source

FY2021 Budget Allocation by Funding Source		
Fund Source	Proposed Budget	Percentage
General Fund (GF)	\$5,244,016	17%
Compact Fund (CF)	\$6,967,192	23%
Compact Fund - TB Mass Screening (CF)	0	0%
Ebeye Special Needs (ESN)	\$2,269,742	7%
Healthcare Revenue Fund (HCRF)	\$3,819,443	12%
Health Fund (HF)	\$3,677,261	12%
Supplemental Health Fund (SHF)	\$665,165	2%
Federal Grants (FG)	\$7,086,487	23%
Taiwan Funds (ROC)	\$500,000	2%
All Others (MOH In-House Funds)	\$402,612	1%
OVERALL TOTAL FY20 MOHHS BUDGET	\$30,631,918	100%

The Table 34 represents a comparison between the Fiscal years 2020 and 2021 and the budget variation for both years is reflected in the given table.

Table 34: FY2021 and FY2020 Budget Variation

FY2021 & FY2020 Budget Variation			
Funding Source	FY2020 APPROVED	FY2021 PROPOSAL	VARIANCE
General Funds (GF)	5,584,814	5,244,016	(340,798)
Compact Funds (CF)	7,588,095	6,967,192	(620,903)
Compact TB Mass Screening	1,110,431	-	(1,110,431)
Compact Funds (ESN)	2,269,742	2,269,742	-
Health Care Revenue Fund (HCRF)	3,748,973	3,819,443	70,470
Health Fund (HF)	3,620,670	3,677,261	56,591
Supplemental Health Fund (SHF)	651,958	665,165	13,207
Federal Grants	8,877,672	7,086,487	(1,791,185)
Taiwan (ROC) Funds	500,000	500,000	-
SUBTOTAL MAJOR FUNDS	33,952,356	30,229,306	(3,723,050)
UH-CANCER & BHSIS	85,527	85,527	-
Global Fund for HIV and TB	172,285	172,285	-
UNFPA	-	-	-
WHO	144,800	144,800	-
SUBTOTAL ALL OTHERS	402,612	402,612	-
Total	34,354,968	30,631,918	(3,723,050)

7. PERFORMANCE MATRICS

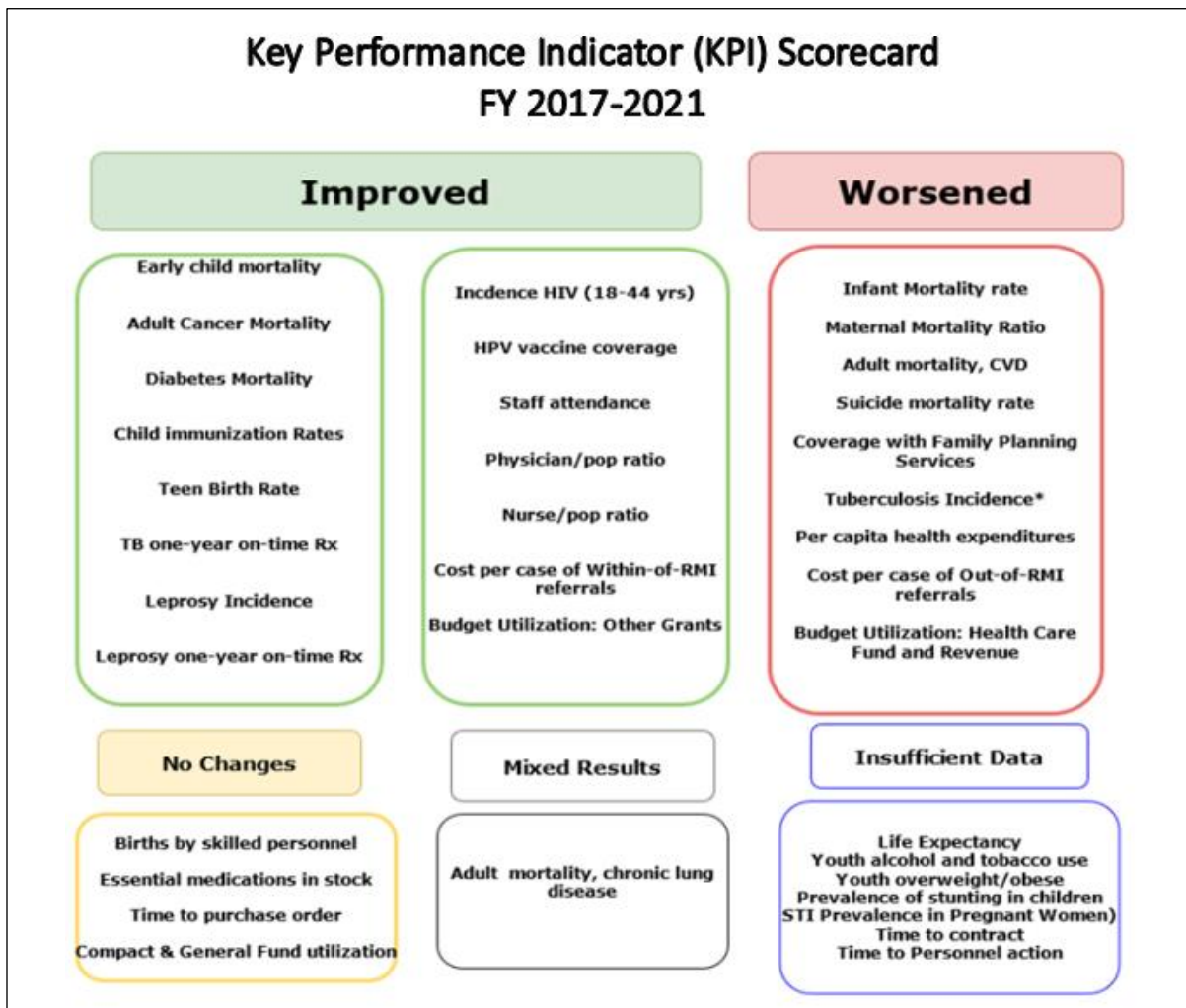
7.1 KEY PERFORMANCE INDICATORS

About the KPI's

Since 2016, the RMI MOHHS collects and reports data on a set of 36 key performance indicators (KPI's). The KPI's are intended to provide accurate, consistently measured, valid data, organized in a way that gives a clear picture of both progress and areas for improvement. Each KPI is meant to summarize overall progress in the selected areas using internationally recommended health and performance indicators that are feasible to measure without great difficulty in the RMI. The current set of 36 indicators fall into the following categories: 1) demographics (e.g., vital statistics), 2) non-communicable diseases (NCDs), 3) maternal & child health (MCH), 4) infectious diseases, and 5) resource and administrative indicators (see *Table 1*).

Overall, since FY 2017, the 15 KPI's show quantitative improvement from the baseline, nine of the KPI's have worsened, four remain largely the same, and nine either have insufficient data or mixed results over the time (see *Figure 5*). The three KPI's have reached their target level more than one year: Early child mortality rate, adult mortality due to diabetes, and Adult human immunodeficiency virus (HIV) incidence. Note: The apparent rise in detected cases of TB is likely the result of active case finding efforts on Ebeye, Majuro, and several Neighboring Islands since 2017.

Figure 67: KPI Scorecard Narrative for FY 2017 to 2021



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Table 35: RMI MOHHS KPI Scorecard for 2021

RMI Ministry of Health and Human Services Key Performance Indicators Annual Scorecard- 2021

Code for trend: ■ = Improving ■ = Getting Worse ■ = No change ■ = Need more data ★ = Target reached

Type		Key Performance Indicator	Target	2016 Result (Baseline)	FY 2018	FY 2019	FY 2020	FY 2021	Trend ^a
Demographic Indicators	1	Life expectancy at birth ^{III} (years)	NT ^c	71.9 yrs. (2011)	71.9 yrs. (2011)	71.9 yrs. (2011)	71.9 yrs. (2011)	71.9 yrs. (2011)	
	2	Infant mortality rate ^{SDG} (per 1000 live births) ^a	12 ^c	15	17	17	17	20	
	3	Early child (<5 years) mortality rate ^{III, SDG} (per 1000 live births) ^{III}	25 ^d	32	20	17	17	21	
	4	Maternal mortality ratio ^{III, SDG} (per 100,000 livebirths) ^{III}	70 ^d	120	193	237	302	305	
NCD Core Indicators	5	Youth 30-day tobacco smoking prevalence ^{III, SDG, b}	NT	31%	31%	31%	31%	31%	
	6	Youth 30-day alcohol use prevalence ^b	NT	0	0	0	0	0	
	7	Youth overweight + obesity prevalence ^b	NT	27%	27%	27%	27%	27%	
	8	Adult mortality rate, cancer ^{SDG} (per 100,000 30-69yo) ^b	122 ^f	128	129	143	156	159	
	9	Adult Mortality rate, cardiovascular disease ^{SDG} (per 100,000 30-69yo) ^h	155 ^f	162	211	247	298	297	
	10	Adult Mortality rate, diabetes ^{SDG} (per 100,000 30-69yo) ^h	360 ^f	451	404	359	343	308	
	11	Adult Mortality rate, chronic lung disease ^{SDG} (per 100,000 30-69yo) ^h	20 ^f	10	17	22	22	29	
	12	Suicide mortality rate ^{SDG} (per 100,000 all ages) ^h	14 ^g	16	19	19	20	24	
MCH	13	Child immunization completeness ⁱ	90% ^j	47%	62%	65%	66%	63%	
	14	Coverage with Family Planning Services ^{III, SDG} (♀15-44yo)	21% ^k	16%	15%	12%	11%	12%	
	15	Teen birth rate ^{III, SDG} (per 1,000 ♀ 15-19yo)	NT	49	48	63	66	60	
	16	Births attended by skilled personnel (%) ^{III, SDG}	95%	99%	98%	97%	99%	99%	★
	17	Prevalence of stunting in children ^{III, SDG} (0-4yo)	<10% ^l	Ø	35% ^m	35% ^m	35% ^m	35% ^m	
	18	Prevalence of overweight in children ^{III} (0-4 yo)	<5% ^l	Ø	4% ^m	4% ^m	4% ^m	4% ^m	★
Infectious Disease	19	Tuberculosis incidence ^{III, SDG} (per 10,000)	≤ 1	30	74 ^r	35	31	18	
	20	TB one-year on-time Rx completion rate	95% ⁿ	87%	81%	91%	92%	81%	
	21	Leprosy incidence ^{SDG} (per 10,000)	< 1	12	13 ^r	6	7	9	
	22	Leprosy on-time Rx completion rate	95% ⁿ	74%	63%	72%	70%	45%	
	23	Incidence HIV ^{SDG} (per 100,000)	0	5	0	0	0	0	★
	24	Pregnant ♀- Syphilis prevalence (%)	NT	Ø	2%	1%	1%	1%	
	25	Pregnant ♀- Gonorrhea prevalence (%)	NT	Ø	3%	2%	2%		

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	26	Pregnant ♀- Chlamydia prevalence (%)	NT	Ø	1%	14%	18%		
	27	Pregnant ♀- Hepatitis B infection (%)	NT	Ø	2%	2%	3%	3%	
	28	Girls protected by HPV vaccine (age 13 yo)	90%	29%	35%	49%	33%	35%	
Admin Indicators	29	Inventory: % meds on essential list in stock ^{SDG}	90%	66%	69%	69%	53%		
	30	Staff attendance: % workrate	90%	40% (Majuro) ^o	No Report	47% (Majuro)	51% (Majuro) No Report (Ebeye)		
	31	a) Purchase order, b) Contract, c) Personnel action processing times (average # days)	<60 days	a) 22 days ^p b) Ø c) 40 days	a) 18.9 days	a) 19 days	a) No report	a) 14 days	
Resource Indicators	32	# of people per physician and # of people per nurse ^{HI, SDG}	600:1 (Dr.) 4:1 (Nurse)	1452:1 (Dr.) 477:1 (nurse)	1,049:1 (Dr.) 246:1 (Nurse)	1,266:1 (Dr.) 243:1 (Nurse)	1,168:1 (Dr.) 254:1 (Nurse)	1,172:1 (Dr.) 255:1 (Nurse)	
	33	Per capita health expenditures per year ^{HI}	NT	\$519	\$560	\$560	\$603	\$603	
	34	Within-RMI Referrals- Average cost per case	NT	\$2,740	\$4,100	\$1,850	\$2,893.04	\$1,965	
	35	Out-of-RMI Referrals- Average cost per case	NT	\$28,451	\$41,280	\$26,501	\$22,535.82	\$27,627	
	36	Budget and end-of-year utilization %: a) Compact (CF) & General Fund (GF), b) Health Care Fund & Health Care Revenue Fund, c) Other Grants ^{HI, SDG}	90%	a) 90% b) 100% c) 76%	a) 89% b) 83% c) 81%	a) 81% b) 86% c) 78%	a) 84.5% b) 106.5% c)	a) 87% b) 86% c)	
Casemix Lists See ANNEX A, Tables 1-4			Top 10 causes of death ^{HI} Top 10 outpatient diagnoses Top 10 hospital admission diagnoses Top 5 reasons for Internal-RMI referrals Top 5 diagnoses for International-RMI referrals						

Abbreviations and Keys:

HI= Healthy Islands indicator (see text below); SDG=Strategic Development Goal indicator; NT= no target set yet; Ø= data not available.

? = uncertain; MCH= maternal & child health; NCD= non-communicable diseases; yo= years of age

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Footnotes:

- ^a 3-year running average up to and including measurement year
- ^b High school youth, grades 9-12.
- ^c Target from RMI MCH 5-year Needs Assessment, 2016-2020
- ^d SDG Global Target
- ^e Baseline from 2011 Youth Risk Behavior Survey in RMI high schools: 32% youth 30-day tobacco; 41% youth 30-day alcohol use
- ^f Target for NCD mortality indicators from WHO NCD Monitoring Framework, calling for a decrease in NCD cause-specific mortality rates of 25% by year 2025 from 2010 baseline. Since we have no 2010 baseline for RMI we are using 2014 rates for baseline. Comparisons between 2016 and 2017 NCD mortality rates were made statistically and there is no significant improvement.
- ^g Target for suicides is to decrease rate by 10% by 2020 from baseline of 18 per 100,000 in 2013 (WHO Mental Health Action Plan 2013-2020)
- ^h 5 year running average up to and including measurement year
- ⁱ Children aged 19-35 months of age complete for 4-DTaP, 3-Polio, 3-HepB, 1-HIB, 1-MMR
- ^j Target from RMI MOHHS Performance Based Budget, 2017
- ^k RMI MOHHS Family Planning Program target is to increase coverage by 5% per year-to-year 2020 (per 2016 RMI Family Planning Program Plan)
- ^l These are WHO cut-offs that define "low prevalence" countries (see http://www.who.int/nutrition/nlis_interpretation_guide.pdf)
- ^m Children 0-59 months of age from 2017 UNICEF Childhood nutrition survey
- ⁿ Target for TB and Leprosy On-Time Completion Rates based on CDC TB Program national targets.
- ^o Cannot compare 2015 with 2016 or determine trend because data for Ebeye work rate percentage (%) not available in 2016
- ^p Fiscal Year 2016 and 2017
- ^q Except as otherwise noted, trend is judged "changed" if there is at least a 10% change from the baseline of KPI Report for Year 2016.
- ^r Majuro TB/Leprosy Mass Screening from June 2018 to November 2018

8. CHALLENGES

Over the period from 2018 to 2021, MOHHS encountered a spectrum of challenges that tested the resilience and adaptability of our healthcare system. One of the foremost challenges was the global COVID-19 pandemic, which necessitated swift and comprehensive responses to mitigate the spread of the virus within our borders. This unprecedented crisis strained healthcare resources, requiring the reconfiguration of services and the establishment of new protocols.

Additionally, ongoing issues such as resource constraints, workforce shortages, and infrastructure limitations persisted, hindering the delivery of optimal healthcare services. Despite concerted efforts, the remote geographical distribution of our population posed challenges in ensuring equitable access to healthcare, particularly in the outer islands.

These challenges underscore the need for continued strategic planning, resource mobilization, and innovative solutions to address the dynamic healthcare landscape and better serve the diverse needs of our communities.

9. CONCLUSION

In conclusion, MOHHS has made significant strides in promoting hospital services as well as public health and well-being throughout the years 2018 to 2021. Through dedicated efforts, the ministry has successfully implemented various health programs and initiatives, addressed key challenges, and leveraged opportunities for improvement.

The commitment to accessible and quality healthcare services is evident in the statistics and achievements outlined in this report. Despite facing unforeseen challenges, the ministry has displayed resilience and adaptability, contributing to positive health outcomes in the communities we serve. As we reflect on the accomplishments and lessons learned, collaboration, innovation, and a focus on preventive measures have been pivotal in our endeavors.

Moving forward, MOHHS remains steadfast in its mission to enhance the health of our population and build a resilient healthcare system for the future. We express gratitude to our dedicated staff, partners, and stakeholders for their unwavering support in achieving our shared goals.

References

1. United Nations International Children’s Emergency Fund (UNICEF). Climate Declaration: Declaration on Children, Youth and Climate Action [Internet]. [cited 2023 Oct 10]. Available from: <https://www.unicef.org/environment-and-climate-change/climate-declaration>
2. World Health Organization. International Health Regulations (2005) [Internet]. 2023 [cited 2023 Oct 10]. Available from: <https://iris.who.int/bitstream/handle/10665/246107/9789241580496-eng.pdf?sequence=1>
3. World Health Organization. Global leprosy (Hansen disease) update, 2021: moving towards interruption of transmission [Internet]. 2022 [cited 2024 Jan 29]. Available from: <https://iris.who.int/bitstream/handle/10665/362412/WER9736-429-450-eng-fre.pdf?sequence=1>
4. Rahevar K, Morishita F, Oh KH, Islam T. Epidemiological review of leprosy in WHO’s Western Pacific Region: 1991–2019. Western Pacific Surveillance and Response Journal [Internet]. 2021 Jul 1 [cited 2024 Jan 29];12(3). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8521134/pdf/wpsar.2021.12.3-034.pdf>

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Annex A: Casemix Lists

Table 1: RMI Top 10 Causes of Death - FY2018-FY2021

	FY2018		FY2019		FY2020		FY2021	
Rank	Underlying Cause of Death	No.	Underlying Cause of Death	No.	Underlying Cause of Death	No.	Underlying Cause of Death	No.
1	Infectious Disease	65	Cardiovascular Diseases	72	Cardiovascular Diseases	95	Cardiovascular Diseases	61
2	Cardiovascular Diseases	55	Diabetes	56	Diabetes Related	53	Diabetes	58
3	Diabetes	46	Cancer	35	Pneumonia	41	Cancer	35
4	Cancer	31	Pneumonia	25	Cancer	36	Pneumonia	16
5	Injury	18	Injury/Accident	15	Sepsis	15	Sepsis	13
6	Liver disease	15	Liver disease	8	Suicide	12	Kidney Disease	12
7	Suicide	11	Septicemia/Sepsis	10	Drowning	10	Chronic Lung Disease	10
8	Hypertension	10	Suicide	9	Perinatal Conditions	9	Drowning/Injury	9
9	Kidney Disease	8	Premature	7	Gastroenteritis	6	Suicide	8
10	Pulmonary/Stroke	7	Gastroenteritis	5	Chronic obstructive pulmonary disease/ Gastrointestinal bleeding	5	Hepatitis B	6

Table 2: Majuro Top 10 Outpatient Diagnoses - FY2018-FY2021

FY2017						FY 2018						FY2020						FY2021					
Rank	Cause	No. of Visits	Rank	ICD-10	Cause	No. of Visits	Rank	ICD-10	Cause	No. of Visits	Rank	ICD-10	Cause	No. of Visits	Rank	ICD-11	Cause	No. of Visits					
1	Acute Upper Respiratory Infection	4,280	1	2012	Encounter for dental examination and cleaning	4,233	1	223	Encounter for immunization	2644	1	223	Encounter for immunization	3482	1	223	Encounter for immunization	3238					
2	Dental caries	1,789	2	K02.9	Dental caries, unspecified	3,887	2	J06.9	Acute upper respiratory infection, unspecified	1114	2	234	Encounter for supervision of normal pregnancy	2655	2	E08-E13	Diabetes Mellitus	2883					
3	Chronic Bronchitis	1,419	3	J06.9	Acute upper respiratory infection, unspecified	2,095	3	2012	Encounter for dental examination and cleaning	835	3	J00-J06	Acute Upper Respiratory Infections	1177	3	234	Encounter for supervision of normal pregnancy	2584					
4	Diabetes	1,313	4	200.8	Encounter for other general examination	1,081	4	K02.9	Dental caries, unspecified	764	4	J20	Acute bronchitis	662	4	200	Encounter for general examination without complaint, suspected or reported diagnosis	2265					
5	Gastroenteritis	1,250	5	223	Encounter for immunization	986	5	200.8	Encounter for other general examination	422	5	E10-E14	Diabetes mellitus	591	5	211.1	Encounter for screening for respiratory tuberculosis	1741					
6	Urinary Tract Infection	1,142	6	J42	Unspecified chronic bronchitis	946	6	J39	Other diseases of upper respiratory tract	389	6	N39.0	Urinary tract infection, site not specified	513	6	I10	Essential (primary) hypertension	1561					
7	Otitis Media	952	7	N39.0	Urinary tract infection, site not specified	654	7	J20	Acute bronchitis	379	7	O34.21	Maternal care for scar from previous cesarean delivery	369	7	J06.9	Acute upper respiratory infection, unspecified	1372					
8	Cellulitis and Abscess	854	8	E11.8	Type 2 diabetes mellitus with unspecified	635	8	E11	Type 2 diabetes mellitus	335	8	I10	Essential (primary) hypertension	344	8	N39.0	Urinary tract infection, site not specified	589					
9	Asthma	684	9	K52.9	Noninfective gastroenteritis and colitis, unspecified	578	9	I10	Essential (primary) hypertension	325	9	M54.5	Low back pain	297	9	Z11.52	Encounter for screening for COVID-19	542					
10	Hypertension	655	10	L03.019	Cellulitis of unspecified finger	465	10	J02	Acute pharyngitis	252	10	O09.89 3	Supervision of other high risk pregnancies, third trimester	225	10	E78.2	Mixed hyperlipidemia	504					

NB: FY2018 data is incomplete due to transition to new system. Medical Records will continue to complete the FY2018 data entry.

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Table 3: Ebeye Top 10 Outpatient Diagnoses - FY2018-FY2021

FY2017			FY2018			FY2019			FY2020			FY2021		
Rank	Cause	No. of Visits	Rank	Cause	No. of Visits	Rank	Cause	No. of Visits	Rank	Cause	No. of Visits	Rank	Cause	No. of Visits
1	Diabetes Mellitus	4,542	1	Diabetes Mellitus	4,913	1	Diabetes Mellitus	4,913	1	Diabetes Mellitus	4,625	1	Diabetes Mellitus	5016
2	Acute Upper Respiratory Infection	2,598	2	Hypertension	3,770	2	Hypertension	3,770	2	Hypertension	3,630	2	Hypertension	4729
3	Hypertension	2,584	3	Acute Upper Respiratory Infection	2,501	3	Acute Upper Respiratory	2,501	3	Acute Upper Respiratory Infection	2,348	3	Cough	2395
4	Normal Pregnancy	958	4	Cough	1,351	4	Cough	1,351	4	Prenatal	1,189	4	Acute Upper Respiratory Infection	2277
5	Physical Therapy	819	5	Conjunctivitis	669	5	Conjunctivitis	669	5	Acute Gastroenteritis	793	5	Prenatal	1329
6	Contraceptive Management	746	6	Acute Gastroenteritis	565	6	Acute Gastroenteritis	565	6	Abscess/Cellulitis (NOS)	631	6	Musculoskeletal Pain	1031
7	Conjunctivitis	724	7	Abscess/Cellulitis (NOS)	539	7	Abscess/Cellulitis	539	7	Musculoskeletal Pain	618	7	Contraceptive Management	824
8	Dental Caries and Eruption	657	8	Non Specific Abdominal Pain	421	8	Non Specific Abdominal	421	8	Community Acquired Pneumonia	494	8	Abscess/Cellulitis	762
9	Acute Gastroenteritis	617	9	Urinary Tract Infection (NOS)	327	9	Urinary Tract Infection	327	9	Urinary Tract Infection (NOS)	656	9	Acute Gastroenteritis	648
10	Abscess/Cellulitis	607	10	Bronchitis	307	10	Bronchitis	307	10	Conjunctivitis	360	10	Conjunctivitis	264

Table 4: Majuro Top 10 Hospital Admission Diagnoses - FY2018-FY2021

FY2017			FY2018			FY2019			FY2020			FY2021		
Rank	Cause	No. of admissions	Rank	Cause	No. of admissions	Rank	Cause	No. of admissions	Rank	Cause	No. of admissions	Rank	Cause	No. of admissions
1	Single live birth	581	1	Normal Delivery	224	1	Z38.0 - Single liveborn infant, born in hospital	315	1	A91 - Dengue hemorrhagic fever	629	1	O80 - Normal Delivery	437
2	Full-term uncomplicated delivery	563	2	Single Born in Hospital	200	2	Encounter for Full Term uncomplicated delivery	212	2	Z38.0 - Single liveborn infant, born in hospital	455	2	Z38.0 - Single liveborn infant, born in hospital	410
3	Diabetes Mellitus	409	3	Single Liveborn, (Outcome of Delivery)	219	3	E11 - Diabetes	131	3	O80 - Normal Delivery	409	3	E11 - Type 2 Diabetes Mellitus	93
4	Hypertension	143	4	Diabetes Mellitus	158	4	J18 - Pneumonia	88	4	J18 - Pneumonia, unspecified Organism	190	4	J18 - Pneumonia, Unspecified	73
5	Pneumonia	132	5	Pneumonia	113	5	A90 - Dengue	43	5	A90 - Dengue Fever	94	5	A90 - Dengue Fever	64
6	Second-degree perineal laceration during delivery	87	6	Hypertension	75	6	I00-I99: Cardiovascular Diseases	97	6	Noninfective gastroenteritis and colitis, unspecified	52	6	N39.0 - Urinary tract infection, site not specified	34
7	Urinary Tract Infection,	85	7	Arteriosclerotic Heart Disease	34	7	J40-J47: Chronic Lower Respiratory Diseases	42	7	E11 - Type 2 Diabetes Mellitus	75	7	A41.9 - Sepsis, unspecified organism	31
8	Chronic Renal Failure	83	8	Pulmonary Tuberculosis	32	8	Noninfective gastroenteritis and colitis, unspecified	26	8	A15.0 - Tuberculosis of lung	32	8	O82 - Cesarean delivery without indication	27
9	Atherosclerotic heart disease of native coronary artery without	77	9	Urinary Tract Infection	30	9	Urinary tract infection, site not specified	20	9	A41.9 - Sepsis, unspecified organism	25	9	I63 - Cerebral Infarction	24
10	Cellulitis	63	10	Chronic renal failure	29	10	Tuberculosis of lung/Sepsis, unspecified	14	10	N39.0 - Urinary tract infection, site not specified	19	10	Tuberculosis of lung/Sepsis, unspecified	14

FY2018 data is incomplete due to transition to new system. Medical Records will continue to complete the FY2018 data entry.

Table 5: Majuro Top 10 Hospital Admission Diagnoses - FY2018-FY2021

FY2017			FY2018			FY2019			FY2020			FY2021		
Rank	Cause	No. of admissions	Rank	Cause	No. of admissions	Rank	Cause	No. of admissions	Rank	Cause	No. of admissions	Rank	Cause	No. of admissions
1	Single Born in Hospital	131	1	Community Acquired Pneumonia	235	1	Community Acquired Pneumonia	235	1	Normal Delivery	99	1	Normal Delivery	176
2	Normal Delivery	122	2	Single Born in Hospital	203	2	Single Born in Hospital	203	2	Single Born in Hospital	97	2	Cesarean Section Without mentioning of indication	78
3	Abscess Nos, Cellulitis Nos	83	3	Normal Delivery	197	3	Normal Delivery	197	3	Pneumonia, organism unspecified	75	3	Gastroenteritis and infectious Colitis	61
4	Single Liveborn, (Outcome of Delivery)	79	4	Single Live Born by Cesarean	102	4	Single Live Born by Cesarean	102	4	Cesarean Delivery	47	4	Community Acquired Pneumonia	51
5	Community Acquired Pneumonia	67	5	Abscess Nos, Cellulitis Nos	91	5	Abscess Nos, Cellulitis Nos	91	5	Single Live Born by Cesarean	44	5	Diabetes Mellitus	48
6	Cesarean Delivery w/o Mention of Indication	55	6	Cesarean Delivery	80	6	Cesarean Delivery	80	6	Diabetes Mellitus	36	6	Cellulitis	45
7	Colic, Abdominal Tenderness	48	7	Hypertension, Unspecified	70	7	Hypertension, Unspecified	70	7	Gastroenteritis, Colitis, Diarrhea	31	7	Abscess	44
8	Gastroenteritis, Colitis, Diarrhea	33	8	Colic, Abdominal Tenderness	56	8	Colic, Abdominal Tenderness	56	8	Community acquired Pneumonia	16	8	Hypertension	39
9	Fever, Chills with Fever	27	9	Gastroenteritis, Colitis, Diarrhea	52	9	Gastroenteritis, Colitis, Diarrhea	52	9	Anemia	11	9	Urinary Tract infection, Bacteriuria	30
10	Urinary Tract Infection, Bacteriuria	23	10	Diabetes Mellitus	40	10	Diabetes Mellitus	40	10	Hypertension, unspecified	11	10	Anemia, Blood Loss	30

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Table 6: Top 5 Reasons for Internal and International RMI referrals - FY2018-FY2021

FY2018			FY2019			FY2020			FY2021		
Rank	Cause	No. of Visits	Rank	Cause	No. of Visits	Rank	Cause	No. of Visits	Rank	Cause	No. of Visits
<i>Internal</i>			<i>Internal</i>			<i>Internal</i>			<i>Internal</i>		
1	Diabetes Related	18	1	Diabetes Related	25	1	Diabetes related	36	1	Diabetes Related	37
2	Orthopaedics	7	2	Abdominal Pain	14	2	Dengue fever	10	2	Ophthalmology	27
3	Abdominal Pain/Swelling	5	3	High Risk Pregnancy/ Swelling/ Accident/ Injury	10	3	Heart Problem/ Pain/ Pregnancy/ birth complication	8	3	Orthopedics	19
4	Fracture / Vomiting/ Abscess/ Cellulitis	4	4	Abscess	6	4	Injury	7	4	Cardiovascular	17
5	Stroke/ Flank Pain/ Lower Back Pain	3	5	Birth Delivery Complication/ Hypertension/ Pain/ Pneumonia/ UTI	4	5	Swelling	6	5	Abdominal Pain	14
<i>International</i>			<i>International</i>			<i>International</i>			<i>International</i>		
1	Orthopedic	33	1	Orthopedic	44	1	Cardiovascular Disease	14	1	Cardiovascular Disease	17
2	Cardiovascular Disease	24	2	Cancer	36	2	Orthopedic	11	2	Cancer	15
3	Cancer	19	3	Cardiovascular Disease	31	3	Cancer	9	3	Ophthalmology	6
4	Ophthalmology	11	4	Congenital Disease	18	4	Urology	7	4	Orthopedic/ Congenital Disease	4
5	Congenital Disease	9	5	Ophthalmology	11	5	Pulmonology/Ophthalmology	5	5	Internal Medicine	2

Annex B: Dr Cody Jack Poem during Swearing in of Hippocratic Oath

The definition of Health according to the WHO

Let me read it now, here is how it goes:

"Health is a state of complete
Mental, physical, and social well-being
and not merely the absence of disease or
infirmity"

So do remember, our dear new interns
It's not just a diagnosis that you have to
discern

Health is when the patient comes to you and
seeks
You out in this time that they are weak
For something has happened, something has
stirred
Something enough to make him or her
disturbed.

A 4-month-old infant with severe SOB
A 63 female with chronic pain in the knee
A G3P0 not feeling kicks again is concerned
An asthmatic who, for a smooth breath, he
still yearns
Interns o interns! What's your assessment and
plan?
What will you do for these three women and
man?

You nebulize and oxygenate but don't forget
to explain
And reassure the mother whose heart is
surely in pain
Consider that the woman because she's
elderly
May not get much benefit from an extensive
surgery
You face the expectant mother, her heart
again broken,
It's time to heal not with drugs but with words
softly spoken

Your asthmatic's wife is shouting, her
husband turning blue,
Though shocked and overwhelmed, you must
know what to do.

Health is, no doubt, full of stressful times
They show up without reason nor rhyme
To think that each patient was stressful
enough
You intern saw ALL of them, you've got it
rough.
Not only this, but you'll also have other
obligations,
Duty shifts, endorsements, discussions, and
presentations

You'll be confronted by responsibilities day
by day
Again, I remind you that you must pay
Attention to your own mental, physical, and
social wellbeing
Be not afraid to seek help when you start
feeling
Overwhelmed and underpowered
Your stresses piling up overhead to tower
Above you are making you sad and dejected.
These feelings must be faced head on and
rejected.

You are joining a profession filled with
nobility
With no shortage of experience and quality.
You have giants at your back to push and
support
To bolster and to squeeze out every ounce of
your effort
Use each of them often and use them well
Add in your struggles and you'll surely not
fail

As you embark this journey of stressful
learning, please be ready,
Be strong, be disciplined, be eager, and above
all, be healthy.

