Report No. DODIG-2012-088 May 16, 2012

Inspector General
United States Department of Defense

Guam Medical Staffing Plan Needs Improvement to Ensure Eligible Beneficiaries Will Have Adequate Access to Health Care

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Acronyms and Abbreviations

AE	Aeromedical Evacuation
GMH	Guam Memorial Hospital
MHS	Military Health System
MTF	Medical Treatment Facility
NICU	Neonatal Intensive Care Unit
NMW	Navy Medicine West
USNH	U.S. Naval Hospital
TPMRC	Theater Patient Movement Requirements Center

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
4800 MARK CENTER DRIVE
ALEXANDRIA, VIRGINIA 22350-1500

May 16, 2012

MEMORANDUM FOR NAVAL INSPECTOR GENERAL

SUBJECT: Guam Medical Staffing Plan Needs Improvement to Ensure Eligible Beneficiaries Will Have Adequate Access to Health Care (Report No. DODIG-2012-088)

We are providing this report for review and comment. Although the Navy Medicine West methodology for determining medical staffing requirements in Guam was reasonable, the resulting plan for providing specialty care did not adequately identify and assess the risks associated with not expanding specialty care in Guam. This is the second in a series of reports regarding the adequacy of medical plans related to the realignment of Service members and their families to Guam. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The Chief of Staff, Navy Medicine West comments were partially responsive to the recommendation. Therefore, we request additional comments on the recommendation by July 16, 2012.

If possible, send a portable document format (.pdf) file containing your comments to audyorktown@dodig.mil. Copies of the management comments must contain the actual signature of the authorizing official. We are unable to accept the /Signed/ symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-8866.

Alice F. Carey
Assistant Inspector General
Readiness, Operations, and Support

Results in Brief: Guam Medical Staffing Plan Needs Improvement to Ensure Eligible Beneficiaries Will Have Adequate Access to Health Care

What We Did

This is the second in a series of reports regarding the adequacy of medical plans related to the realignment of Service members and their families to Guam. Our objective was to determine whether the methodology and plan used to determine the number and type of medical staff needed for eligible beneficiaries in Guam ensure that beneficiaries have adequate access to care, given the expected population increases resulting from the realignment to Guam.

What We Found

The Navy Medicine West methodology for determining medical staffing requirements was reasonable. However, the resulting plan did not adequately identify and assess the risks associated with not expanding specialty care in Guam although the beneficiary population was projected to increase from 14,195 in FY 2005 to 37,467 by FY 2020.* For example, Navy Medicine West personnel did not adequately plan for nine specialties that are available to beneficiaries in Okinawa, Japan, such as neurology, neonatal intensive care unit, and gastroenterology. This occurred because Navy Medicine West personnel:

- did not apply their methodology for determining medical staffing requirements to the specialties that the U.S. Naval Hospital Guam did not provide; and
- assumed the aeromedical evacuation system that moved 374 patients (including 64 urgent and priority patients) out of Guam in FY 2010 could handle the increased requirements resulting from the Guam realignment without coordinating with the Air Force.

Consequently, the Navy Medicine West plan did not sufficiently mitigate the risks associated with not providing additional specialty care in such a remote location and ensure the beneficiaries in Guam will have adequate access to health care.

What We Recommend

We recommend that the Chief, Navy Medicine West:

- apply the staffing methodology for specialties that U.S. Naval Hospital Guam does not provide;
- coordinate with the U.S. Air Force to determine if the aeromedical evacuation system can handle future demands; and
- identify and assess the risks of not providing certain specialty care, and develop plans for mitigating unacceptable risks.

Management Comments and Our Response

The Chief of Staff, Navy Medicine West, disagreed with our finding and recommendation, stating that Navy Medicine West considered all specialty requirements necessary to accommodate the beneficiary increases in Guam and their plans do not result in unacceptable risk. We believe that this report fairly represents the extent of planning at the time of the audit. The Navy Medicine West comments were partially responsive. We request that the Navy reconsider its position on the recommendation and provide responses to the final report. See the Recommendation Table on the back of this page.

* Population projections are notional and may change over time.

Recommendation Table

Management	Recommendation Requires Comment	No Additional Comment Required
Chief, Navy Medicine West	Yes	

Please provide comments by July 16, 2012.

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Introduction

Objective

This is the second in a series of reports regarding the adequacy of medical plans related to the realignment of Service members and their families to Guam. Our objective was to evaluate the methodology used to determine the number and type of medical staff needed and the plan for providing specialty care to eligible beneficiaries in Guam. Specifically, given the expected population increases resulting from the realignment in Guam, we determined whether the methodology and plan ensure that eligible beneficiaries have adequate access to care. See the appendix for a discussion of the scope and methodology related to the objective.

Background

In 2005 and 2006, the Governments of Japan and the United States held a series of discussions that resulted in an agreement to relocate elements of the III Marine Expeditionary Force from Okinawa, Japan, to Guam. The total active duty (including the Coast Guard) and family member populations in Guam were projected to increase from 14,195 in FY 2005 to 37,467 by FY 2020.[1] DoD is studying whether to significantly reduce the number of Marines it plans to relocate to Guam. These changes to the population projections could affect medical planning. The FY 2012 National Defense Authorization Act prohibits funding for Guam realignment projects until the Commandant of the Marine Corps submits updated force projections and the Secretary of Defense submits a master plan to Congress.

Guam Realignment Responsibilities

The Office of the Secretary of Defense established the Joint Guam Program Office to lead the coordinated planning efforts among DoD Components and other stakeholders to consolidate, optimize, and integrate the existing DoD infrastructure capabilities on Guam. Joint Guam Program Office leadership coordinated with Navy Bureau of Medicine and Surgery officials to ensure Guam medical plans were developed and strategically aligned with the latest developments and resource timelines for the Guam realignment. The Navy Bureau of Medicine and Surgery is the headquarters command for Navy medicine. Navy Medicine West (NMW) is responsible for defining Guam health care requirements based on population and workload; identifying the resources available to meet the established requirements; and planning and executing the resource, facility, and personnel requirements. NMW coordinated with the medical treatment facilities (MTF), specialty leaders, Navy Bureau of Medicine and Surgery, Naval Facilities Engineering Command,

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[1] Baseline population is from the Guam Integrated Military Development Plan, July 11, 2006; Army, Navy, and Marine Corps population increases from the Final Environmental Impact Statement, Guam and Commonwealth of the Northern Marianas (CNMI) Military Relocation, July 2010. Air Force and Coast Guard increases from the 36th Air Wing, March 2010.

Joint Guam Program Office, U.S. Air Force counterparts, and other involved parties to determine the appropriate timelines and location for meeting health care demands.

Guam Health Care

U.S. Naval Hospital (USNH) Guam is comprised of the main hospital and two branch clinics, medical and dental, on Naval Base Guam. The Guam relocation initiative placed increased requirements on USNH Guam because the active duty and family member beneficiary population was projected to more than double. In addition to Military Health System (MHS) beneficiaries, USNH Guam has provided health care to the Guam population for more than 100 years, according to its Web site. According to the Guam Integrated Military Development Plan, the anticipated population growth required new medical space to meet the demand for outpatient and secondary care medical services. Planning initiatives for USNH Guam included construction of a replacement hospital, along with two new branch clinics at Apra Harbor and Finegayan.[2] During the audit, the replacement hospital was under construction, and the two clinics were in the design phase.

Other than USNH Guam, Guam Memorial Hospital (GMH) is the only inpatient facility on Guam. However, GMH generally does not serve MHS-eligible patients other than occasional emergency room visits and for use of their Magnetic Resonance Imaging machine. A clinic on Anderson Air Force Base, Guam also provides primary care services; however, it refers all inpatient and specialty services to USNH Guam.

Since 1988, Guam has been classified as a Medically Underserved Area,[3] which demonstrates the island's difficulty to meet health care needs. According to the July 2010 Final Environmental Impact Statement, the island experienced shortages of health care providers and lacked specific health care specialists. The report further explained that it is often difficult to recruit specialists from the U.S. mainland because of its remote location and lower pay scale. Referrals for specialized services not available in Guam required MHS beneficiaries to fly to Okinawa, Hawaii, or elsewhere.

Since 1988, Guam has been classified as a Medically Underserved Area…

Guam Aeromedical Evacuation

USNH Guam relies on the aeromedical evacuation (AE) system to transport patients who require medical services not available in Guam. The U.S. Air Force AE system transports stabilized patients using fixed wing aircraft with specially trained air crews. The Theater Patient Movement Requirements Center (TPMRC) Pacific at Hickam Air Force Base, Hawaii, approves patient movement requests for the Pacific region.

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[2] The USNH Guam replacement project was not funded through the realignment initiative.

[3] A Medically Underserved Area is an area designated by the U.S. Department of Health and Human Services Health Resources and Services Administration as having too few primary care providers, high infant mortality, high poverty, or high elderly population.

TPMRC Pacific personnel classify patients eligible for transportation through the AE system as either routine, priority, or urgent based on their condition, movement precedence, and special requirements. Routine patients require movement but can wait for a regularly scheduled AE mission or use the commercial ticket program. Priority patients require movement within 24 hours and urgent patients require movement as soon as possible. Both urgent and priority patients are transported on Special Assignment Airlift Missions ('alert birds'). No designated AE assets were located in Guam. Therefore, the aircraft and crew responsible for the AE alert missions were deployed from the 18th AE squadron at Kadena Air Force Base, Okinawa.

Review of Internal Controls

DoD Instruction 5010.40, "Managers' Internal Control Program (MICP) Procedures," July 29, 2010, requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We determined that an internal control weakness existed in the NMW planning for providing specialty care in Guam. Specifically, NMW personnel did not apply their methodology for determining medical staffing requirements to the specialties that USNH Guam did not provide. In addition, NMW personnel assumed the AE system could handle the increased requirements resulting from the Guam realignment without fully coordinating with the Air Force. We will provide a copy of the report to the senior official responsible for internal controls in NMW.

Finding. A Better Plan Needed for Providing Specialty Care to Guam Beneficiaries

The NMW methodology for determining medical staffing requirements was reasonable. However, the resulting plan did not adequately identify and assess the risks associated with not expanding specialty care in Guam although the beneficiary population was projected to increase from 14,195 in FY 2005 to 37,467 by FY 2020.[4] For example, NMW personnel did not adequately plan for nine specialties that are available to beneficiaries in Okinawa, such as neurology, neonatal intensive care unit (NICU), and gastroenterology. This occurred because NMW personnel:

- did not apply their methodology for determining medical staffing requirements to the specialties that USNH Guam did not provide; and
- assumed the AE system that moved 374 patients (including 64 urgent and priority patients) out of Guam in FY 2010 could handle the increased requirements resulting from the Guam realignment without fully coordinating with the Air Force.

Consequently, the NMW plan did not sufficiently mitigate the risks associated with not providing additional specialty care in such a remote location and ensure the beneficiaries in Guam will have adequate access to health care.

The Navy Medicine West Staffing Requirements Methodology Was Reasonable

Although the Navy did not have an approved model to determine medical staffing requirements, the NMW methodology for determining staffing requirements was reasonable. NMW personnel developed an approach for determining staffing requirements and coordinated its approach with the Navy Manpower Analysis Team (NMAT). The NMAT was supportive of the NMW methodology as a sound and valid method of establishing staffing requirements. The methodology factored in population size and beneficiary category (for example, active duty or family member), the amount of health care the population was expected to consume, and expected provider productivity. After calculating the minimum staffing needed to meet the health care demand, NMW personnel sought expert opinion from its specialty leaders[5] to determine whether additional staffing was required based on local command or geographical area factors.

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[4] Population projections are notional and may change over time. Changes to the population projections could affect medical planning.

[5] Navy Medicine specialty leaders are experts in their fields and are responsible for medical personnel assets.

NMW personnel used the following formula to determine physician staffing requirements:

$$\frac{\text{Future Population} \times \text{Utilization Rate}^{6} \times \text{Average Relative Value Unit per visit}^{7}}{\text{Specialty Relative Value Unit Production Benchmark}^{8}}$$

To determine nurse staffing requirements, NMW personnel used California nurse-to-patient ratios for most specialties because they believed the standards were the most conservative and increased the nursing requirements. NMW personnel used more specific nursing requirement standards for specialties, such as the operating room, emergency room, and intensive care unit. For example, NMW personnel used the Association of periOperative Registered Nurses staffing standards for the operating room because they were designed for that specialty.

During our site visits, clinicians from USNH Guam and USNH Okinawa discussed staffing requirements for multiple specialties, including pediatrics, psychiatry, psychology, and emergency room care. NMW calculations met or exceeded the staffing requirements recommended by the clinicians for all but one specialty that NMW planned to provide at USNH Guam. In addition, NMW personnel calculated 14 family practice physicians, which was consistent with the American Academy of Family Physicians' physician-to-patient ratio. Overall, despite not having an approved staffing standard, the NMW methodology for determining staffing requirements was reasonable for those specialties that USNH Guam provided at the time the plan was developed. However, NMW personnel did not determine staffing requirements for specialties that USNH Guam did not provide.

However, NMW personnel did not determine staffing requirements for specialties that USNH Guam did not provide.

The Navy Medicine West Plan for Providing Health Care Needs to Identify and Assess Risks

The NMW plan for providing health care did not adequately identify and assess the risks associated with not providing additional specialties at USNH Guam. NMW personnel planned for USNH Guam to provide 19 specialties, such as mental health, orthopedic surgery, and pediatrics. Although the active duty and family member population was expected to more than double, NMW personnel did not plan to provide additional

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[6] NMW personnel used utilization rates (the rate that specialties are consumed by various beneficiary categories) developed in the 2007 Healthcare Requirements Analysis. The Healthcare Requirements Analysis rates were calculated using 2005 data; however, NMW personnel re-calculated the rates with 2010 data for the specialties with the largest workload and determined the rates were still valid.

[7] NMW personnel weighted the medical encounters based on complexity and length of stay (relative value units).

[8] NMW planners used the NMW 2009 relative value unit benchmarks, or benchmarks that estimate provider productivity, because they were more conservative than its 2010 benchmarks; therefore, the calculations required more providers.

specialties beyond what was available at USNH Guam when the plan was developed. Although the following specialties were available at the naval hospital or on the local economy in Okinawa, NMW personnel did not plan to provide these specialties in Guam:

- Neurology
- Neurosurgery
- Cardiology
- NICU
- Podiatry
- Gastroenterology
- Pediatric Psychology
- Pediatric Psychiatry
- Cardio Thoracic Surgery

NMW estimated that USNH Guam will deliver approximately 38 percent more babies than USNH Okinawa after the realignment. However, NMW personnel stated that the NICU would remain at USNH Okinawa because it was staffed with Air Force resources and NMW was not able to relocate those personnel. NMW officials intended for USNH Okinawa to remain a referral center for the Pacific region[9] and, thus, a more robust hospital than USNH Guam. However, with the active duty and family member populations expected to more than double in Guam, NMW officials should identify and assess the risk of not providing certain specialties in Guam.

Unrelated to the Guam realignment, USNH Guam officials planned to continue using circuit rider programs, where physicians periodically travel to Guam, to provide health care in specialties not provided at USNH Guam. USNH Guam offered limited specialty care through the circuit rider programs in the following specialties:

- Pediatric Cardiology and Pediatric Development—2 times a year;
- Maternal Fetal Medicine—quarterly; and
- Gastroenterology—every 6 weeks and provided and funded by the Department of Veterans Affairs under an existing sharing agreement.

In addition, USNH Guam officials planned to use contract physicians to provide pediatric psychological and psychiatric care through circuit rider programs. Further, USNH Guam considered using circuit rider programs for neurology and podiatry. Circuit rider programs provide limited access to specialty care because providers are only available periodically and are typically not available for providing urgent or emergent care.

Navy Medicine West Personnel Should Apply Their Methodology to Calculate Staffing Requirements for Specialties Not Provided at USNH Guam

NMW personnel did not apply their methodology to calculate staffing requirements for the specialties that USNH Guam did not provide when the plan was developed. NMW personnel believed the workload for these specialties was too small for providers to maintain their skills. Calculating staffing requirements for specialties not provided, regardless of whether NMW used the existing methodology or an alternative one, would

[9] In FY 2010, USNH Guam sent less than 8 percent of patients requiring AE to USNH Okinawa for care. The majority—69 percent—were sent to Tripler Army Medical Center, Hawaii.

help NMW to identify and assess the risk of not providing these specialties. When performing their calculations, NMW personnel should capture the total workload for Guam and Okinawa beneficiaries by including purchased care and direct care provided outside of Guam and Okinawa MTFs. In FY 2010, 13 percent of outpatient encounters for Guam beneficiaries occurred outside of USNH Guam through the purchased care system.[10] If after performing staffing calculations NMW personnel determine that not providing certain specialties would pose an unacceptable risk then they need to develop plans to mitigate the risks.

Navy Medicine West Personnel Should Coordinate With the Air Force to Assess AE Resources

NMW planned to rely on the AE system, which consists of a finite number of aircraft and personnel, for specialty care services unavailable in Guam. However, as of April 2011, NMW personnel did not coordinate with the Air Force to determine if the AE system could handle the increased demand that will likely result from the realignment initiative. NMW planners agreed that contacting the Air Force should be the next step in their planning process for Guam specialty care. In May 2011, after we notified NMW of our concerns about AE resources, NMW officials began coordinating with TPMRC Pacific and U.S. Transportation Command personnel.

Guam Accounted for About Half of the FY 2010 Pacific Region AE Alert Missions and Increases Are Likely

Guam accounted for about half of the Pacific region AE alert missions from July 2010 through January 2011 and Guam missions will likely increase because of the realignment.

> *Guam accounted for about half of the Pacific AE alert missions from July 2010 through January 2011…*

According to TPMRC officials, in FY 2010, 374 patients were moved out of Guam using the AE system, of which 64 were categorized as urgent or priority. In Okinawa, eligible beneficiaries have access to health care at the naval hospital and on the local economy. These beneficiaries also use the AE system to receive health care outside of Okinawa. Of the Services, the Marine Corps used AE in Okinawa the most. From FY 2008 through FY 2010, the Marine Corps accounted for 822 of the 1,952 aeromedical evacuations out of Okinawa. Moving the active duty Marine Corps and family members from Okinawa to Guam will likely result in an increased demand for AE services because of the lack of available specialty care on the local economy and at USNH Guam.

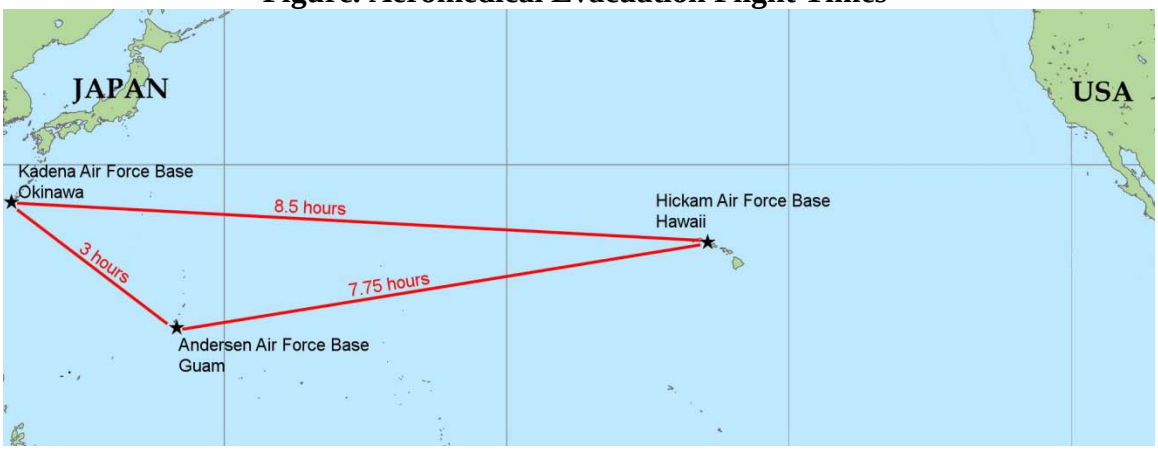
[10] Purchased care data provided by TRICARE Area Office – Pacific.

TPMRC Pacific Officials Were Concerned About the Likely Increase in AE Requirements

In April 2011, TPMRC Pacific officials voiced concerns that NMW personnel did not coordinate with the Air Force to determine whether the AE system could handle the increased requirements that will likely result from the Guam realignment. Specifically, TPMRC Pacific officials expressed concern about the location of AE assets, the distance to Guam, and the increased requirements that could result from the Guam realignment. The figure below shows AE flight times in the Pacific region.

> *Specifically, TPMRC Pacific officials expressed concern about the location of AE assets, the distance to Guam, and the increased requirements that could result from the Guam realignment.*

Figure. Aeromedical Evacuation Flight Times



Source: National Oceanic and Atmospheric Administration; TPMRC Pacific

In addition to the flight times shown in the figure, time is required to receive and validate patient requests, alert aircraft crew, locate aircraft and medical equipment, establish the mission itinerary, and transport patients from the hospital to the aircraft. TPMRC Pacific officials stated that it takes at least 7 hours to get an aircraft and personnel from Kadena Air Force Base in Okinawa to Guam and up to 24 hours[11] from the time the AE need is identified to medically evacuate a patient to Hawaii. According to TPMRC Pacific officials, when they alert aircraft for an AE mission, it reduces mission capabilities for the rest of the theater. When an AE crew at Kadena Air Force Base goes out on a mission, it could be 3 to 5 days before the crew returns to Kadena. Additionally, TPMRC Pacific officials were concerned that if an aircraft breaks down in Guam while transporting a seriously ill patient from another location, Guam may not have the capabilities to care for the patient because it lacks the required specialty care. Fully coordinating with the Air Force to determine whether the AE system can handle the

[11] DoD Instruction 6000.11, "Patient Movement," September 9, 1998, establishes 24 hours as the maximum movement window for priority patients. Urgent patients require movement as soon as possible to save life, limb, or eyesight.

increased requirements will help NMW identify and assess the risks associated with not providing certain specialties at USNH Guam.

Conclusion

The NMW methodology for determining medical staffing requirements in Guam was reasonable for the specialties USNH Guam provides. However, the resulting plan did not adequately identify and assess the risks associated with potential shortages of care in specialties not provided at USNH Guam. NMW personnel should calculate staffing requirements for all specialties that may be needed in Guam. By calculating requirements for all specialties and coordinating with the Air Force to evaluate the AE system resources, NMW personnel can then identify the risks of not providing some specialties and determine if those risks are acceptable. For those risks determined unacceptable, NMW personnel should develop plans to mitigate the risks. Those plans could include increasing the specialties provided, the use of circuit riders, the use of the AE system, the use of sharing agreements, or other means NMW personnel determine to be appropriate. Without complete risk mitigation plans, NMW officials cannot ensure adequate access to health care for beneficiaries in Guam. We recognize that DoD is reexamining the Guam relocation initiative and may significantly change the number of Marines relocating to Guam; however, regardless of the changes NMW still needs to plan for providing health care in Guam considering the increased beneficiary population.

Management Comments on the Finding and Our Response

The Chief of Staff, NMW, commenting on behalf of the Surgeon General of the Navy, disagreed with the finding. The Principle Deputy Assistant Secretary of the Navy (Manpower and Reserve Affairs) endorsed the comments on behalf of the Department of the Navy. The Chief of Staff stated that he felt that the audit team misunderstood how NMW planned for nine specialties identified in the report as available in Okinawa but not at USNH Guam. He also said that failure to include a service does not indicate a failure to consider or plan for that service and evaluations of each specialty led to deliberate decisions on whether to include each specialty. The Chief of Staff agreed that NMW personnel did not apply the staffing methodology to specialties that USNH Guam does not provide and did not include these specialties in its medical planning documentation. However, he stated that NMW used alternative data sources and they believe these data sources better estimate medical needs for these specialties. For each of the nine specialties cited on page 6 of this report, the Chief of Staff described the rationale for the NMW staffing decision and the risk mitigation strategy, which, in most cases, included continued reliance on the AE system, the circuit rider program, or both. For example, the Chief of Staff said that the cardiology and cardio thoracic surgery workload at USNH Guam would not support the need for these services and they would continue to rely on the AE system to mitigate risk. He also said that we incorrectly identified cardiology and cardiothoracic surgery as specialties available at USNH Okinawa. The Chief of Staff cited a 2008 assessment of cardiology needs, prepared by the Chief of Cardiology at U.S. Naval Medical Center San Diego, which he

said concluded that the AE system will be more than adequate to meet future needs based on 17,000 additional beneficiaries.

The Chief of Staff specifically disagreed with and requested we remove seven passages from the report. The first three passages concerned coordination with the Air Force regarding the impact on the AE system. He disagreed with our conclusions that NMW personnel assumed the AE system would be adequate without coordinating with the Air Force and that TPMRC Pacific officials were concerned about this lack of coordination. He explained that NMW personnel had coordinated with the Air Force and U.S. Transportation Command on three occasions in May and June 2011. He said that Air Force personnel representing the AE system concluded that the addition of 17,000 additional beneficiaries will not diminish their ability to continue to meet mission requirements. The Chief of Staff also disagreed with three passages regarding risk assessment and mitigation. He asked us to remove report passages that state that NMW did not adequately identify, assess, and mitigate risks associated with potential shortages of specialty care in Guam. The Chief of Staff stated that he believes that the audit report assumes, invalidly, that NMW did not plan for or consider certain specialties or risk mitigation. He stated that the continuing risk mitigation strategy will be to rely on the AE system and to continue use of the circuit rider program. The Chief of Staff provided an analysis of five "at risk" specialties and the projected impact on urgent and priority AE given the addition of 17,000 beneficiaries. He concluded that the projected increase was not significant and supported the NMW conclusion that not providing certain specialties would not result in unacceptable risk. In fact, NMW concluded that no unacceptable risks would develop as a result of the expanded population. Finally, the Chief of Staff requested we remove a report passage that states circuit rider programs provide limited access to care. He cited USNH Guam's 2010 inspection by the Medical Inspector General and accreditation by The Joint Commission[12] as evidence that the periodic nature of circuit rider programs is not a source of risk or concern. These two reviews look for quality of care concerns and areas where gaps in care may exist.

Our Response

The audit team based the conclusions in this report on information obtained during the course of the audit. In May 2011, NMW provided us with the USNH Guam medical staffing plan that was the subject of this report. During the audit (6 months of meetings, follow-up communication and data requests, and staffing a discussion draft of this report), NMW officials did not discuss or provide support for an alternative staffing methodology for USNH Guam. NMW officials provided a staffing plan in May 2011 that did not include projected demand or staffing requirements for specialties not provided at USNH Guam. When we asked a NMW official for documents that show workload calculations for these specialties he told us that they did not exist. This same official told us that these specialties were not considered for staffing at USNH Guam. During our audit, NMW did not provide the workload projections included in the Chief of Staff's comments during our review. However, unlike the staffing plan provided

[12] The Joint Commission is an independent, not-for-profit organization that accredits and certifies U.S. health care programs.

to us in May 2011, the Chief of Staff's comments did not include a description of the methodology or data used in the calculations. In their USNH Guam staffing plan, NMW planners based workload projections on the movement of 17,000 beneficiaries from Okinawa to Guam, plus other projected gains. We acknowledged in our report that the projected population increases may change; however, we believe the conclusions in this report apply regardless of the future population. We agree that skill erosion is a legitimate concern and the beneficiary population in Guam may not support providing certain specialties at USNH Guam.

We disagree with the Chief of Staff's characterization of the 2008 cardiology assessment; this was not an assessment of the AE system. The assessment discussed aspects of cardiology care performed well at USNH Guam, highlighted gaps in the standard of care, and discussed increased risk associated with the potential population increases. The assessment offered several options to mitigate the gaps, but provided no plan of action for selecting or implementing any of the options. The assessment concluded that the U.S. Naval Medical Center San Diego Cardiology Department could manage the anticipated volume increase from Guam. However, the assessment did not evaluate the current or future capabilities of the U.S. Air Force AE system. As we noted on page 6 of this report, nine specialties, including cardiology and cardio thoracic surgery, were available to beneficiaries in Okinawa but not in Guam. Although not available at USNH Okinawa, cardiac care was available locally in Okinawa.

We did not remove any of the report passages that the Chief of Staff asked us to remove from our report. The passages related to the AE system are factually accurate and relevant to our finding; despite years of planning, NMW officials began coordination with the Air Force only after our May 2011 visit. Further, as of February 2012, TPMRC Pacific officials remained concerned about the impact of Guam population increases on the AE system. See our response to management comments in part 2 of the recommendation on page 13 of this report for more detail. Regarding the three passages on risk assessment and mitigation, we reached these conclusions based on the information provided by NMW personnel. NMW plans for staffing USNH Guam did not include risk assessments or mitigation plans, and NMW officials provided no evidence that they assessed the risk of not providing certain specialties. Additionally, we believe that the Air Force is better suited to determine the impact of population increases on the AE system. Finally, we did not remove the passage that highlights the limited access to care resulting from circuit rider programs. As discussed on page 6 of this report, circuit rider programs provide periodic access to care. Further, we reviewed the 2010 Joint Commission report on USNH Guam and found that it did not assess risks associated with circuit rider programs or the ability of USNH Guam to meet the demands of future population growth. The Chief of Staff's comments did not include a copy of the Medical Inspector General inspection results.

Recommendation, Management Comments, and Our Response

We recommend that the Chief, Navy Medicine West:

1. Apply the staffing methodology to determine requirements for specialties that U.S. Naval Hospital Guam does not provide. When determining these requirements, Navy Medicine West should include workload resulting from purchased care and direct care received elsewhere.

Management Comments

The Chief of Staff, NMW, disagreed with the recommendation, stating that although he agreed that NMW personnel did not apply the staffing methodology for specialties that USNH Guam does not provide, they instead used an alternative methodology that they believe better estimates medical needs. The Chief of Staff stated that NMW determined which medical specialties to provide in Guam based on historical and projected workload. He said that NMW personnel had conducted informational, decisional, and planning discussions over several years to address the health care needs of beneficiaries in the Pacific region, and they considered several factors, including resources, population, demand, and case mix. The Chief of Staff further stated that NMW officials remain steadfast that the approach met the spirit and intent of the recommendation.

Our Response

The NMW comments were partially responsive. NMW personnel did not inform us of an alternative staffing approach until their response to a draft of this report. An alternative methodology may meet the intent of the recommendation; however, unlike the staffing plan provided to us in May 2011, the Chief of Staff's comments did not include a description of the alternative methodology or data used in the calculations. In May 2011, a NMW official told us that NMW did not calculate requirements for specialties not provided at USNH Guam. As stated on page 6 of this report, they believed that the workload for these specialties would be too small for providers to maintain their skills. We asked for documentation to support this belief and were told that there was none. We concluded that NMW officials did not adequately plan for specialties not provided at USNH Guam based on the information provided by NMW during our audit.

NMW personnel did not provide documentation to show that they used an alternative methodology or how they applied that methodology. Without additional documentation and details of the alternative methodology used, we were unable to determine whether NMW fully estimated the projected workload, including direct care and purchased care received at other locations. Also, we could not verify whether the alternative methodology used to determine staffing for specialties not provided at USNH Guam was reasonable or met the intent of the recommendation. We request that the Chief of Staff provide additional details, including documentation to support the NMW analyses and calculations for the specialties USNH Guam will not provide.

2. Coordinate with the U.S. Air Force to determine if the aeromedical evacuation system can handle the expected increased demand for services resulting from the Guam realignment initiative.

Management Comments

The Chief of Staff, NMW, disagreed with the recommendation, stating that NMW personnel have communicated verbally and in writing with representatives of the AE system both in the Pacific and at U.S. Transportation Command, ensuring the AE system will continue to handle future demands for Guam beneficiaries. Further, Air Force representatives "at all levels" have concluded that the addition of up to 17,000 additional beneficiaries will not limit their ability to continue to meet AE mission requirements. The Chief of Staff included an analysis of five "at risk" specialties and the projected impact on urgent and priority aeromedical evacuations, concluding that the projected 79 percent increase was not significant.

Our Response

The NMW comments were not responsive. TPMRC Pacific officials disagreed with the NMW Chief of Staff's statements. Upon receipt of the NMW comments, we contacted officials at TPMRC Pacific who stated that they have never taken the stance that the AE system would be adequate to support future requirements. As of February 2012, TPMRC Pacific officials remained concerned about the impact of Guam population increases on the AE system. They stated that they need NMW to provide additional details on projected AE requirements so that the Air Force can properly fund the AE increases. We acknowledged on page 7 of this report that NMW officials began coordination with the Air Force in response to this audit. However, NMW officials did not provide any support to show that Air Force staff at any level concluded that the addition of up to 17,000 beneficiaries will not diminish their ability to continue to meet mission requirements. The Chief of Staff stated that reliance on AE is part of the NMW risk mitigation strategy for Guam beneficiaries; as such, NMW should include formal coordination with the Air Force in its planning process. We believe that the Air Force is best suited to determine whether a projected 79 percent increase in urgent and priority AE is significant. We request that the Chief of Staff reconsider his position on the recommendation and provide comments on the final report.

3. Based on staffing calculations and coordination with the U.S. Air Force, identify and assess the risks of not providing certain specialty care at U.S. Naval Hospital Guam, and develop plans for mitigating unacceptable risks.

Management Comments

The Chief of Staff, NMW, disagreed with the recommendation, stating that NMW analyzed and assessed the expanding Guam population and concluded that no unacceptable risks will develop because of the increased beneficiary population. The Chief of Staff added that NMW anticipates the population increase to be predominately healthy, young Marines and their family members. Further, he stated that the health care delivery system, in addition to the staffing increases projected by their comprehensive

analysis, will continue to meet their needs. The Chief of Staff stated that the continuing mitigation strategy is to rely on the AE system that is currently in place and continue using the circuit rider program.

Our Response

The NMW comments were not responsive. In his response, the Chief of Staff did not demonstrate how NMW concluded that there will be no unacceptable risk and provided no evidence that their stated risk mitigation strategy is supported by a risk assessment. The USNH Guam staffing plan that NMW provided did not include risk assessments or mitigation plans, and NMW officials provided no evidence that they assessed the risk of not providing certain specialties. We believe that NMW cannot fully assess and identify risks of not providing certain specialty care or develop sufficient risk mitigation plans until it projects future requirements for all specialties and includes coordination with the Air Force in its planning process. We request that the Chief of Staff reconsider his position on the recommendation and provide comments on the final report.

Appendix. Scope and Methodology

We conducted this performance audit from March 2011 through January 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit objective was to evaluate the methodology used to determine the number and type of medical staff needed and the plan for providing specialty care to eligible beneficiaries. Specifically, given the expected population increases resulting from the realignment in Guam, we determined whether the methodology and plan ensure that eligible beneficiaries have adequate access to care. This is the second in a series of reports regarding the adequacy of medical plans related to the realignment of Service members and their families to Guam.

We interviewed the NMW officials responsible for planning, executing, and staffing health care requirements in Guam and officials from the Joint Guam Program Office, TRICARE Management Activity, and the Navy Bureau of Medicine and Surgery. To gather information regarding the methodology and plan for providing specialty care, we met with representatives from TPMRC Pacific, the Department of Veterans Affairs, U.S. Marine Corps Forces Pacific, U.S. Pacific Fleet, U.S. Pacific Command, and the TRICARE Area Office Pacific. Additionally, we met with USNH Guam and USNH Okinawa providers, nurses, risk managers, and other officials to obtain their perspective and concerns regarding specialty care in Guam.

To determine whether the methodology was reasonable, we reviewed calculations used by NMW to project physician and nursing staffing levels. We compared clinician-recommended staffing levels to NMW staffing requirements. We researched available physician and nursing staffing standards and compared them to NMW recommended staffing levels. Additionally, we reviewed the Navy's plans regarding the use of the AE system for specialty care that will not be offered at USNH Guam or available on the island of Guam.

Use of Computer-Processed Data

We did not rely on computer-processed data in developing our findings, conclusions, or recommendation.

Prior Coverage

During the last 5 years, the Government Accountability Office has issued one report discussing medical treatment facility medical personnel requirements. Unrestricted GAO reports can be accessed over the Internet at http://www.gao.gov.

GAO

GAO Report No. 10-696, “Enhanced Collaboration and Process Improvements Needed for Determining Military Treatment Facility Medical Personnel Requirements,” July 2010

Navy Medicine West Comments

DEPARTMENT OF THE NAVY
NAVAL INSPECTOR GENERAL
1254 9TH STREET SE
WASHINGTON NAVY YARD DC 20374-5006

IN REPLY REFER TO:
7540
Ser N1/0223
27 Feb 12

From: Naval Inspector General
To: Department of Defense, Inspector General

Subj: GUAM MEDICAL STAFFING PLAN NEEDS IMPROVEMENTS TO ENSURE ELIGIBLE BENEFICIARIES WILL HAVE ADEQUATE ACCESS TO HEALTH CARE (PROJECT NO. D2011-D000LF-0093)

Encl: (1) ASN(M&RA) ltr dtd 23 Feb 12

1. Enclosure (1) is forwarded as a matter under your cognizance and responds to your 17 January 2012 draft report. If you have any questions regarding this letter, please contact [redacted]

CLUSTER DAVIES
By direction

DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
(MANPOWER AND RESERVE AFFAIRS)
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

FEB 23 2012

MEMORANDUM FOR NAVAL INSPECTOR GENERAL

SUBJECT: Guam Medical Staffing Plan Needs Improvement to Ensure Eligible Beneficiaries Will Have Adequate Access to Health Care (Project No. D2011-D000LF-0093.00)

Thank you for the opportunity to review and comment on the Department of Defense Draft Report on Guam Medical Staffing Plan. The Department of the Navy has reviewed the draft report and supports the Surgeon General of the Navy and Navy Medicine West's recommendations to non-concur with the findings and recommendations. Navy Medicine West's comments are attached.

My point of contact in this matter is [redacted]

Robert T. Cali
Principle Deputy Assistant Secretary of the Navy (Manpower and Reserve Affairs)

Attachments:
As stated

DEPARTMENT OF THE NAVY
NAVY MEDICINE WEST
4170 NORMAN SCOTT ROAD SUITE 5
SAN DIEGO, CA 92136-5521

IN REPLY REFER TO:

5041
Ser 00S/0088
8 Feb 12

MEMORANDUM FOR CHIEF BUREAU OF MEDICINE AND SURGERY

Subj: DODIG DRAFT REPORT ON GUAM: NAVY MEDICINE WEST RESPONSE

Ref: (a) Email from BUMED Secretariat of 4 February 2012
(b) DODIG Draft Report on Guam dtd 17 January 2012, Project No. D2011-D000LF-0093.000

Encl: (1) Amplifying Background Information

1. In accordance with reference (a), the following response and enclosure (1) are provided following a review of reference (b):

a. **General**: Navy Medicine West DOES NOT concur with the recommendations delineated in the DODIG Draft Report.

b. **Response to 3 DOD IG Recommendations:**

(1) Apply the staffing methodology for specialties that U. S. Naval Hospital (USNH) Guam does not Provide (NON-CONCUR): While we agree that we did not apply the staffing methodology for specialties that USNH Guam does not provide, we instead reviewed numerous sources of data, workload estimates for each additional specialty, and the urgent and non-urgent aeromedical evacuation occurrences related to these specialties for TRICARE beneficiaries. We believe these data sources better estimate medical needs. Following this comprehensive review, we remain steadfast that our approach met the spirit and intent of the DODIG's recommendation, and our conclusion to NOT add these additional specialties in the planning forecast remains unchanged.

(2) Coordinate with the US Air Force to determine if the aeromedical evacuation system can handle future demands (NON-CONCUR): We have previously stated to the DODIG both verbally and in writing that we have coordinated with representatives of the aeromedical evacuation system both on the ground and at Transportation Command ensuring their system will continue to handle potential future demands for TRICARE beneficiaries. Bottom line: Air Force staff at all levels concluded that the addition of TRICARE beneficiaries, up to the amount of 17,000

additional beneficiaries, will not diminish their ability to continue to meet mission requirements.

We disagree specifically with the following passages of the draft report and request that the following comments be removed:

- Page 3, "NMW personnel assumed the AE system could handle the increased requirements resulting from the Guam realignment without coordinating with the Air Force.";
- Page 7, "NMW Personnel did not coordinate with the Air Force to determine if the AE system could handle the increased demand that will likely result from the realignment initiative.";
- and Page 8, "TPMRC Pacific Officials voiced concerns that NMW personnel did not coordinate with the Air Force to determine whether the AE system could handle the increased requirements that will likely result from the Guam realignment."

We have communicated both verbally and in writing with U. S. Air Force and TRANSCOM officials. On 31 May 2011, we conversed with [redacted] USAF, TPMRC Pacific, who stated that meeting the AE mission in light of increasing populations would not be a problem. In June, 2011 we spoke to [redacted], USAF, who coordinates AE on the ground in Guam. [redacted] stated that the increasing population would not be sufficient enough to compromise the AE system's ability to reach mission accomplishment. In June, 2011 we engaged with [redacted], USN, Deputy Surgeon, TRANSCOM, to discuss the strategic AE implications of the potential increased beneficiary population on Guam. [redacted] concurred with all the above.

Navy Medicine West staff has engaged with representatives of the AE system from the "boots on the ground" level in Guam to the "strategic" level at PACOM and TRANSCOM, with assurance that the increased beneficiary population in Guam, up to 17,000 additional beneficiaries, will not limit the ability of the AE system to meet its mission.

(3) Identify and assess the risks of not providing certain specialty care at Naval Hospital Guam and develop a plan for mitigating unacceptable risks (NON-CONCUR). Based upon our analysis and assessment of the expanding population of Guam, which has included continuous dialogue with the Marine Corps, we

conclude there are no unacceptable risks that will develop due to an expanded eligible beneficiary population. While the population is poised to increase, it is anticipated to be a predominantly healthy population of young Marines and their family members, and the current health care delivery system, coupled with the staffing increases projected by our comprehensive analysis, will continue to be adequate to meet the various needs.

We disagree specifically with the following passages of the draft report and request that the following comments be removed from the draft report:

- Page 4, "Consequently, the NMW plan did not sufficiently mitigate the risks associated with not providing additional specialty care in such a remote location and ensure the beneficiaries in Guam will have adequate access to health care."
- Page 9, "the resulting plan did not adequately identify and assess the risks associated with potential shortages of care in the specialties not provided at USNH Guam. NMW Personnel should calculate staffing requirements for all specialties that may be needed in Guam."
- Page 5, "However, NMW personnel did not determine staffing requirements for specialties that USNH Guam did not provide."

The current status of the healthcare provided to our beneficiaries in Guam is not in question. The DoD IG draft report assumes in the passages identified above that given the non-inclusion of nine identified specialties in the staffing plan for a future beneficiary population in Guam that 1) those specialties were not considered or planned for, and 2) the risks associated with non-inclusion were not considered. This is an invalid assumption.

During the planning process, NMW personnel considered available resources across all medical specialties; the population at the various locations; the healthcare demand for various medical specialties by location; the economies of consolidation of various medical specialty services; and the requirement to ensure an appropriate "case mix" for our medical specialists to maintain their skill sets. The latter issue is a significant one - clinicians who do not maintain a robust practice can result in a significant patient safety risk. NMW staff

consistently factors "skill erosion" in all staffing decisions and did so in this analysis. We view "economies of consolidation" as having an appropriate patient volume and an appropriate case-mix (variety of cases) to maintain the breadth and depth of our specialists' skills. Based on historical and projected workload, NMW determined which medical specialties to plan care for in Guam.

In terms of risks and mitigation, the continuing mitigation strategy is to 1) rely on the aeromedical evacuation system that currently is in place and 2) continue the successful use of the circuit rider program. To address the impact that urgent and priority AE will have on the AE system, an analysis of the historical and projected AE use for five "at-risk" specialties is presented in the chart below. The FY-2010 Guam beneficiary population of 22,000 and the average AE urgent and priority AE per year for FY-2009 and FY-2010 are shown. With a projected addition of 17,000 new beneficiaries, the projected AE burden for each of the specialties is estimated.

Specialty	2010 Base Population	Average Urgent AE for FY 09-10	Projected New Population	Estimated Annual AE Based on Projected Population Increase of 17,000 Beneficiaries
Neurology	22,000	2	39,000	3
Neurosurgery	22,000	2	39,000	3
NICU	22,000	15	39,000	29
Cardiology/CT Surgery	22,000	12	39,000	21
GI	22,000	2	39,000	3

As per above data, the "increased burden" on the AE system is not significant. Further, given that the estimated annual AE based on projected population increase of 17,000 beneficiaries demonstrates the "acute need" for each specialty, this further solidifies Navy Medicine West conclusion that non-inclusion of these particular specialties will not result in an unacceptable risk to the beneficiaries of Guam.

We disagree specifically with the following passages of the draft report and request that these comments be removed from the draft report:

- Page 6, "Circuit rider programs provide limited access to specialty care because providers are only available periodically and are typically not available for providing urgent or emergent care."

Military Treatment Facilities (including USNH Guam) are subject to external review by The Joint Commission (TJC) which verifies compliance with patient safety and quality standards. USNH Guam is a full TJC Accredited organization, last surveyed in June 2010. USNH Guam was granted full accreditation for a period of three years.

Concurrent with the Joint Commission Accreditation survey in June 2010, the Medical Inspector General (MEDINSGEN) conducted a thorough inspection of USNH Guam. The MEDINSGEN assesses the services and programs administered by USNH Guam. During this inspection USNH Guam was found "Satisfactory", the highest category that is granted by MEDINSGEN.

It should be noted that a similar circuit rider program is currently successfully employed in the European AOR. All MTFs in the European AOR have similarly successfully achieved full TJC accreditation and have received "successful" on their respective MEDIG inspections.

Together, these two extensive reviews provide an assessment of the scope and quality of care provided at USNH Guam. They look for quality of care concerns, and areas where gaps in care may exist. Neither organization identified the Circuit Rider program or the "periodic" nature of their services to be a source of risk or concern for the beneficiaries of USNH Guam. Based on the limited increased burden on the AE system as identified in the chart above, and the findings of The Joint Commission and MEDINSGEN, Navy Medicine West believes that the services provided by USNH Guam today, and in the future if 17,000 additional beneficiaries are moved to Guam, are and will continue to be appropriate for our beneficiary population. Again, a very important issue is prevention of provider skill erosion for these specialties as a consequence of limited case load based on our projections. Provider skill erosion is a patient safety issue.

Subj: DODIG DRAFT REPORT ON GUAM: NAVY MEDICINE WEST RESPONSE

2. Should additional information be needed, my points of contact are [redacted]

M. E. BROUKER
Chief of Staff

6

Subj: DODIG DRAFT REPORT ON GUAM: NAVY MEDICINE WEST RESPONSE

AMPLIYFING BACKGROUND INFORMATION

Overview of current Guam Health Care Status for Perspective. The health care needs of our beneficiary population in Guam are being met via a robust combination of organic medical assets assigned to USNH Guam; "Circuit Riders" which provide specialty care during recurring visits to Guam; and current aeromedical evacuation system. We cite USNH Guam's successful Joint Commission Survey and subsequent three year accreditation awarded in June 2010. In addition, recent audits by the DoD IG have not revealed any concerns with the quality of life or healthcare for our beneficiaries in Guam.

The original Defense Posture Realignment Initiative (DPRI) outlined the potential movement of up to 17,000 Marines and their Family Members to Guam. Although recent dialogue with the Marine Corps suggests a much smaller number likely nearing 4700, as recent as 6 February 2012, the DODIG directed us to plan for the initial 17,000 which we have.

Knowing our patients, we also know the type of health care they consume and the frequency with which they consume it. Given that the care of our current beneficiaries in Guam is not in question, the focus of any adjustments to the care provided is therefore based on our assessment of the up to 17,000 additional beneficiaries. To describe these beneficiaries we would account for them as young, healthy, screened (via the overseas screening program), and primarily consumers of primary care and OB services. Any changes made to the types of care provided in Guam would most appropriately be made in relation to these descriptors and the types of care these additional beneficiaries will consume.

There were numerous inputs considered as part of the decision making process regarding the types of medical care to provide in Guam. We will not attempt to address every factor that was considered in our decision making process, but rather focus on a few of the factors we consider most significant. It is important to note that each of our decisions regarding Guam was made as part of a larger picture which involved Okinawa and our assets and obligations there.

Enclosure (1)

Geography. Geography plays a significant role in planning care for our beneficiaries. Guam is located approximately 3,700 miles from Hawaii and Okinawa is approximately 4,500 miles from Hawaii. Given its location within the Pacific Region, the Naval Hospital at Okinawa has been considered the Referral Center in the Pacific since the closing of Clark Air Force Base (and its associated hospital) in 1991. Okinawa was chosen due to many factors, including its geographic accessibility, and the co-location of other military services (i.e., Air Force), and consolidated location of personnel (i.e., Kadena Air Base). A new state of the art Naval Hospital is under construction in Okinawa, with an occupancy date of Spring, 2013.

Coordination. The Naval Hospitals at Guam, Okinawa, and Yokosuka are part of a formal "WestPac Alliance". The Commanders of these three facilities have worked together to plan the care for beneficiaries in, and share resources of this region. Their input was given tremendous consideration in this planning process.

The Process. Over the past several years, key personnel at NMW have held a series of informational, decisional, and planning discussions to address the healthcare needs of our beneficiaries in the Pacific Region. The Defense Policy Review Initiative (DPRI), and the potential movement of USMC personnel within the region, has always been at the forefront of our planning. Throughout, first and foremost, the health and well being of our beneficiaries in Guam remains our #1 priority. During these sessions, NMW personnel considered available resources across all medical specialties, the population at the various locations, the healthcare demand for various medical specialties by location, the economies of consolidation of various medical specialty services, and the requirement to maintain an appropriate "case mix" for our medical specialists to maintain their skill sets and prevent skill erosion. We view "economies of consolidation" as having an appropriate patient volume and an appropriate case-mix (variety of cases) to maintain the breadth and depth of our specialists' skills. Based on historical and projected workload, NMW determined which medical specialties to plan care for in Guam.

DODIG Findings: Comments Concerning. Navy Medicine West disagrees with the finding "A Better Plan Needed for Providing Specialty Care to Guam Beneficiaries." This finding outlined the following specific area of concern:

- ***NMW did not adequately plan for nine specialties of care in Guam that are available in Okinawa.*** We feel that a misunderstanding exists regarding this concern. Failure to include a service (i.e. Cardiology) as part of the planned services at Naval Hospital Guam does not indicate a failure to consider or plan for that service. In fact, as discussed above, a careful analysis was conducted by NMW Staff regarding the specialties that would/would not be included as part of planned care in Guam. Each of the specialties in question was evaluated for inclusion, and a deliberate decision made to include or not include based on several factors. While we believe these have been addressed in the past, we have included below a discussion of each specialty addressed in the draft report.

As indicated above, each of the identified Medical Specialties from this Draft Report are discussed below in greater detail. The identified Medical Specialties are: Neurology, Neurosurgery, Cardiology, Cardio Thoracic Surgery, NICU, Podiatry, Gastroenterology, Pediatric Psychiatry, and Pediatric Psychology.

- Neurology. The average workload for enrollees of NH Guam in Neurology for the past three years would require approximately 0.3 full time equivalents (FTE) Neurologist. Between FY 2009 and 2010, there were a total of three Urgent AE for Neurology needs. Assuming that the workload in Guam doubled due to increasing population, we would reasonably expect a 0.6 FTE Neurologist need. This would result in a less than optimal use of this limited resource, and likely degradation of Specialist skill. Mitigation Plan-Continued use of the AE System and/or circuit rider program.

- Neurosurgery. The requirement for Neurosurgery in Guam is even less than for Neurology; less than 0.1 FTE. In essence, this indicates that a Neurosurgeon would be able to "stay busy" 1/10th of the time, as well as gain 1/10th of the needed "case mix" to maintain a healthy and skillful practice. Additionally, there is value added by co-location of Neurology and Neurosurgery services at one referral Medical Center. There were a total of three Neurosurgery urgent AE from Guam in FYs 2009 and 2010. Mitigation Plan-Continued use of the AE System and/or circuit rider program.

- Neonatal Intensive Care Unit (NICU). USNH Guam had an average of 15 Urgent AE per year to USNH Okinawa for FYs 2009 and 2010. We estimate that a population increase of 17,000 beneficiaries would result in 29 Urgent AEs per year to USNH Okinawa. Additionally, our discussions with experts in this field indicate that a NICU/Neonatologist would require at least one admission per day that would require services such as intubation and ventilation (higher levels of care than routine occur at NH Guam), to maintain proficiency. This rate of NICU admissions is less than 10% of the recommended NICU admission rate to adequately utilize NICU services and serve to maintain provider skill. Mitigation Plan-Continued use of the AE System. Additionally, placement of two NICU trained RNs at NH Guam, which will give added expertise in the rare occasions that stabilization of infants is required while awaiting transport.

- Cardiology/Cardio Thoracic Surgery. Cardiology and CT Surgery are not specialties that are offered at NH Okinawa. This was reported in error in the draft discussion. Regardless, workload does not support the need of Cardiology or CT Surgery services in Guam. The risk of not including Cardiology services at NH Guam would include a potential increase in the need for AE services. At the request of Commander, Navy Medicine West, a thorough assessment of the "Cardiology Needs" of NH Guam was conducted by the Chief of Cardiology, Naval Medical Center San Diego, in 2008. In her report, she opined that use of the AE system is meeting current patient care needs, and will be more than adequate to meet future needs based on 17,000 additional beneficiaries. Insertion of a CT Surgery team would result in skill erosion. Mitigation Plan-Continued reliance on the AE system.

- Podiatry. NH Guam currently has one podiatry billet. The inventory of Podiatrists has been diminished, and therefore this billet has been unfilled. Podiatry services are currently furnished via circuit rider program. Mitigation Plan-Fill current billet and/or continued use of circuit rider program.

- Gastroenterology. GI service in Guam is currently being met by a "circuit rider" program. Workload for GI in Guam requires 0.1 FTE. Ultimately, even with an increase in beneficiary population, offering this service is Guam is not an appropriate decision due to skill erosion. Mitigation Plan-Continue with Circuit Rider provider program.

- Pediatric Psychiatry and Psychology. Currently in place are a contract for a full time Pediatric Psychologist, with a Circuit Rider Pediatric Psychiatrist every 6 weeks. No continued risks. Mitigation plan-not required.

Inspector General
Department of Defense