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Best Medical Advice: Providing Medical Leadership in Uncertain Times

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ABSTRACT Military physicians must often balance medical and operational priorities when providing advice to operational commanders. This case describes how a Navy Medical Corps Officer serving with a Marine Corps helicopter squadron during the initial stages of the COVID-19 pandemic helped manage risk.

INTRODUCTION

Commanding officers (COs) of tactical units rely on their physicians to provide advice on medical and public health issues that may impact military operations. Commanders expect medical officers to be subject matter experts even when the medical community has yet to reach consensus. The following case highlights a junior officer's challenge with managing risk during the COVID-19 pandemic.

CASE: Lieutenant Anthony Greco

In April of 2020, my squadron was training at Keesler Air Force Base when the number of COVID-19 cases in the USA rose sharply and our higher headquarters issued guidance on testing and quarantine procedures. The detachment consisted of more than a third of our squadron's personnel and helicopters and the event would fulfill a significant portion of the annual training requirements. My CO asked for recommendations on how to proceed with our training. At the time, there were no confirmed cases of COVID-19 at Keesler, but if cases arose, there were no capabilities to test or quarantine our Marines. The squadron was staying in a hotel and working in tight quarters. After discussion with the CO, I advocated for returning the detachment early, even though it would limit training. My concern was that if cases developed among our

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Published by Oxford University Press on behalf of the Association of Military Surgeons of the United States 2021. This work is written by (a) US Government employee(s) and is in the public domain in the US. unit, it might be difficult to get our people home. The CO was reluctant, as this training was critical to the squadron's readiness. I advised that given the virulence of COVID-19 and the tight living and working conditions, a single case could lead to the entire detachment being quarantined for 2 weeks. The CO ultimately agreed, understanding that a small sacrifice in flight hours could prevent a massive loss of flight hours if COVID-19 were to spread among the squadron. His next question was whether we should decontaminate the helicopters and flight equipment, and if so, how? There were no procedures in place for this, but I had read an article with preliminary results suggesting COVID-19 could not remain viable in the environment more than 72 hours. Decontaminating the returning helicopters and equipment would have taken man-hours and resources far in excess of what the squadron could support. I advised the CO to have the detachment return after the remainder of the unit had left for the day. We would leave the helicopters outside and the equipment in an isolated section of the hangar for 72 hours to prevent any potential contamination. Likewise, the returning Marines would go directly home and limit any contact for 72 hours to determine if anyone developed symptoms. These recommendations were based on preliminary data rather than any governing body directives, but the CO required medical advice, and it was the best I could propose at the time. Shortly after the detachment returned, I recommended switching from our normal operations to a day crew and a night crew who would not inhabit the building at the same time in order to create separate teams within squadron. The goal was to continue operations to the maximum extent possible while mitigating time lost from quarantine and contact tracing if cases of COVID-19 occurred. It was difficult to take a stand and give advice without established medical science and institutional procedures, but this was a responsibility that many physicians face within or outside the military. Ultimately, these decisions allowed us to continue operations with minimal disruptions.

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As medical officers assigned to operational units, we are called upon to provide health advice to our commanders. Usually, it is on the health of a particular individual, but sometimes the advice focuses on public or occupational health. No matter what the context, providing our best medical advice to operational commanders requires wisdom. Wisdom in how we develop our recommendations, how we communicate our advice, and how we adjust those recommendations based upon the guidance and feedback received from our commander.

Wisdom in Developing Your Recommendations

Most operational commanders have little medical training and they expect their "Docs" to be expert clinicians and public health experts. Those expectations can seem high for a general medical officer or recent residency graduate, but that's the job. Seeking expert advice, reviewing the medical literature, and good clinical reasoning learned during one's medical training equips and enables our young military physicians to seek out evidence-informed options for their commanders. It is important to remember that when working in a clinic or hospital, one's role as a physician/clinician is to lead patientcentered care, that is, to deliver medical care as the primary mission. When one is assigned to an operational unit, the role shifts. While daily activities may involve patient care, one's focus shifts to the primacy of the operational unit's mission. In this case, the primary concern of the CO was the readiness of the unit to perform their assigned mission. The health and welfare of his Marines was a necessary enabler to accomplish the unit's mission, but not sufficient to accomplish the mission by itself. Lieutenant Greco properly recognized that his role was to assist his commander-who was focused on the unit's readiness mission-in appreciating the potential impacts if training was conducted without adjusting for COVID-19 quarantine and isolation requirements.

Wisdom in Communicating Your Advice

Commanders have many roles and one of them is to balance risks. This is often done after gathering key and critical information to make timely decisions. This requires trusted advisors who can present information in a way that informs the commander's composite risk assessment, which influences their decision-making. Operational physicians are most effective when they communicate their recommendations and advice through the lens of risk. One technique is to transpose medical risks into operational risk in terms of "risk to force" and the "risk to mission." This allows commanders to more easily integrate medical factors with other risks they are balancing. Uncertainty complicates this process. With risk, the outcome of a known probability of an event is unknown, but with uncertainty, the probability of the event happening is also unclear, making it much more difficult for commanders to know how much total risk they are accepting.¹ LT Greco's challenge in providing recommendations on decontaminating

	USMC leadership attributes		
1.	Justice	8.	Enthusiasm
2.	Judgment	9.	Bearing
3.	Dependability	10.	Unselfishness
4.	Initiative	11.	Courage
5.	Decisiveness	12.	Knowledge
6.	Tact	13.	Loyalty
7.	Integrity	14.	Endurance

helicopters and equipment was grounded in uncertainty. In response, he used available evidence to inform his recommendations to allow the unit to conduct its mission. His additional recommendations, such as dividing the unit into two halves with no cross-contact, were based upon a forward-thinking approach that considered how to mitigate the impact of a positive COVID-19 exposure to the unit.

Wisdom in How Those Recommendations Might Need to be Adapted to Best Support the Mission

LT Greco demonstrated many of the 14 leadership traits espoused by the Marine Corps (Table I) while advising his commander during COVID-19 pandemic: judgment, initiative, integrity, courage, and knowledge are but a few. I would like to emphasize his adaptability and initiative as key attributes that should be cultivated in all operational physicians. Through repeated engagements and discussions with his commander, LT Greco was proactive and adapted his recommendations to optimize his commander's decision space. The role of advising commanders is not a "fire and forget" activity; it requires endurance, determination, and that ability to find solutions to problems that seem to be unsolvable. Bravo Zulu.

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CONFLICT OF INTEREST STATEMENT

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REFERENCES

- 1. De Groot K, Thurik R: Disentangling risk and uncertainty: when risktaking measures are not about risk. Front Psychol 2018; 9: 2194.
- RP 0103 Principles of Marine Corps Leadership: United States Marine Corps Training and Education Command. Available at https:// www.tecom.marines.mil/Portals/120/Docs/Student%20Materials/CRE ST%20Manual/RP0103.pdf; accessed February 26, 2021.