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THE MILITARY HEALTH SYSTEM: ADAPTING THE QUADRULPLE AIM

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ABSTRACT

The Military Health System (MHS) is a vast, global, integrated healthcare delivery system. One of the largest healthcare organizations in the United States, the MHS manages a $52 billion budget and has the solemn responsibility for the health of the Armed Forces to be ready force. As the MHS is transforming its own business practice, they are adopting many principles outlined in the Quadruple Aim. MHS is experimenting on innovative approaches to improve the individual care experience. Notably, MHS is working to improve access to both inpatient and outpatient services across all its platforms. MHS is working to provide improved health opportunities outside the traditional hospital and clinic environment. By utilizing new models of healthcare, MHS is reducing per capita cost of care delivery. This will become more apparent as the MHS realigns its organizational structure under the Defense Health Agency as required by Congress in

KEYWORDS

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Disclosures

Multiple interviews were performed in preparation of this report. They include general officers and high-ranking officials within the defense health agency, as well as the current director of health policy initiatives for the Military Health System. The views and opinions expressed by those interviewed do not necessarily reflect the official position of the Department of Defense or those of the United States Government. Further, as a senior leader in the military reserve, the opinions expressed in this paper reflect my own opinion and may not reflect those of the Department of Defense or U.S. Government.

Introduction

The Military Health System (MHS) is a vast, global, integrated healthcare delivery system. As one of the largest healthcare organizations in the United States, the MHS provides health care services to over 9.4 million beneficiaries. This includes active duty service members, their eligible dependents, military retirees, and select members of the Guard and Reserve. In total, this represents 7 different uniformed services in the United States. Currently, the MHS operates a $52 billion annual budget through both direct and purchased care. The MHS is executed via three military departments (Army, Navy (including Marine Corps), and Air Force). Direct care is provided through 54 hospitals, 377 outpatient clinics, and 250 dental clinics world-wide. Approximately 85% of beneficiaries utilize MHS services annually. In the most recent published data (2013), there were 20,000 inpatient admissions and 1.9 million outpatient visits (Department of Defense, 2017). The system is supported by more than 60,000 civilian personnel and 86,000 military personnel.

For those beneficiaries who may either not live close to a military treatment facility (MTF; a.k.a., hospital) or when specialty care is unavailable, the MHS is obligated to provide access to healthcare via a purchased care option. The MHS mechanism for this program is TRICARE, an insurance product operated through hospital partnerships, civilian networks, and local contractual agreements. Up to this year, there were three tiers of TRICARE enrollment similar to a health maintenance organization. TRICARE Prime enrollees are assigned a primary care manager who supports overall health of the patient to include preventive services. The PCM also acts as a gate keeper to specialty services. TRICARE standard is the non-networked product that is used as a supplement to Medicare with an annual deductible and cost sharing arrangement. Finally, TRICARE extra is similar with a slightly increased sharing arrangement.

In 2014, a series of critical articles appearing in the New York Times and other major news outlets shed concern over a potentially failing military health system (LaFraniere & Lehren, 2014). With voiced concerns for patient safety, questionable quality of care, and significant cost overruns, Congress demanded investigation. That year, Secretary of Defense Chuck Hagel ordered a complete review of the MHS. Identifying multiple inefficiencies and problems, recommendations for reorganization of the MHS were submitted to Congress. In the 2017 National Defense Authorization Act (NDAA; Congress, U.S., 2016), Congress directed that the military health system be reorganized under a single entity known as that defense health agency. This agency was established "… to assume responsibility for shared services, functions and activities of the MHS and other common clinical and business processes" (Secretary of Defense, 2013). The governance changes allow for a consistent approach to the care of the patient. Under the new governance structure, overall civilian authority falls to the Under Secretary of Defense for Health Affairs (USD/HA) with direct reporting authority first to the Undersecretary of Defense for Personnel & Readiness and then to the Secretary of Defense. Within the MHS, the Director of the DHA has the authority to develop strategy, execute policy, and manage the budget for the entire health system. In this report, I interviewed the founding director of the DHA, Lt. Gen. Doug Robb. Supporting the DHA director is the Director of Operations, with whom I also interviewed.

Just over four years ago, and prior to the MHS organizational changes, senior military health

system leaders modified the IHI quadruple aim to fit into a military construct. Seeing the value of the IHI initiative, the MHS decided that the Triple Aim (now Quadruple Aim) would guide their 'true north' and mission. To that end, the MHS has embraced better care, improved population health, and lower costs across the entire enterprise. The core business of the MHS is to integrate medical care for both the active military force as well as peacetime civilian care. As a modification of the fourth aim, they chose to make readiness (medical readiness of their population and fitness to deploy on behalf of the United States) their goal ("A ready medical force and ready medical force"; J. Clark, personal communication, 2017).

Improving the Individual Care Experience

Almost a decade ago, the MHS adopted the Institute of Medicine's definition of quality as "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (Quality of Health Care Committee, 2001). In addition to the general IOM definition, the MHS set quality policies that aligned with the six core areas of safety, effectiveness, efficiency, timeliness, equanimity, and patient-centeredness (Health Affairs, 2002).

Patient care quality is the responsibility of the MTF commander (equivalent of hospital CEO). Each MTF has a designated safety officer who is responsible to assess standards which are assessed through various metrics annually. The DHA uses three core surveys to assess the patient care experience.

The first is the health care survey of DoD Beneficiaries which surveys 250,000 members annually to assess the experience of enrollees about health, preventative care, ease of access and customer service. In an attempt to maintain public transparency, select consolidated results may be queried. For FY 2016, when compared to a national benchmark, the MHS significantly underperformed in rapid access to care, physician communication, customer service, specialty care rating, and preventive care. It met or exceeded benchmarks in disease prevention programs (e.g., smoking cessation) and overall satisfaction with health plan options. Because access to care has been a major problem, the MHS sought best practices in large systems (e.g., Kaiser Permanente, Geissenger Health, & Intermountain Health). One solution was a 'first call resolution' program where patients have medical needs addressed during a single phone call. Appointment scheduling has been simplified and the number of daily open slots available for primary care has increased patient satisfaction. From a provider's perspective, an unintended consequence of eased scheduling for a population that does not require co-payment is the ease to miss appointments without consequence. It is reported that in many primary care clinics the no-show rate may be as high as 30% (J. Clark, personal communication, 2017). This must be dealt with in an organized fashion.

A second report used to measure patient experience is the TRICARE inpatient satisfaction survey that examines beneficiary experience of care at either a military hospital or civilian healthcare facility. Similar to the first report, DoD results are compared against national benchmarks. Based on more than 80,000 respondents in 2016, both direct and purchased care met or exceeded all CMS benchmarks. In almost every category, general and service-line satisfaction scores were higher for direct care versus purchased care (Ipsos Public Affairs, 2016). According to Lt. Gen. Robb, speculation as to improved metrics was based on reorganization of primary care. The Patient Centered Medical Home construct was adopted and implemented across many facilities throughout the MHS. In 2016, 60% of beneficiaries reported at least one clinic visit that year with a primary care physician. More than 90% saw a member of the patient center medical home (e.g., nurse practitioner or physician assistant). The number was slightly higher for those on active duty.

The final core reporting survey is the Joint Outpatient Experience Survey. Prior to 2016, this survey was administered in various forms by each of the separate military health branches. According

to Dr. Koehlmoos (director of health policy for the MHS; personal communication, 2017), with creation of the DHA, a dialogue has begun to align metrics through a single working group. For direct care experience, customer service is managed by the local hospital. For those using purchased care, customer complaints seem to still persist at relatively high levels (personal communication, 2017). According to Lt. Gen. Robb, with new structural changes occurring within MHS governance, local purchased care will fall to regional markets controlled by the hospital administrator (hospital director). Therefore, purchased care will be managed at a local level with the intent of having stronger local relationships and optimal contractual agreements.

Increased transparency and public reporting of such data is a new endeavor for the MHS. Initially launched in 2014, the MHS has a publicly accessible transparent portal[1] where quality metrics can be displayed by participating hospitals. Starting in 2016, data on patient safety and health outcomes started to be released. Compared to some organizations that publish their health metrics with great detail, the MHS and DoD must intentionally be somewhat opaque because of a double burden. According to Lt. Gen. Robb, although the MHS mission is "to provide high quality healthcare for a deployable fighting force, it must also be vigilant to issues of national security within its beneficiary population. To preserve the strength of the force, it would be inappropriate to provide details on the types and proportions of illness or specifics on delivered care" (personal communication, 2017). Despite these limitations, senior leaders from the DHA informed me that greater transparency is expected to become available both internally and to a slightly lesser degree, externally.

Patient safety aimed at improving the medical experience is a core task for which all participating hospitals and providers in the MHS strive. The MHS developed a patient safety program to create a culture of high-quality care to prevent potential harm. According to Lt. Gen. Robb (personal communication, 2017), the 2017 NDAA stipulates that the MHS must work toward becoming a highly-reliable organization (HRO). The DHA leadership has mandated safety reporting across all facilities that include harm, no harm, and near-miss events. Similar to many organizations, the patient safety reporting system is an anonymous, voluntary, internet-based system. Last year, there were more than 100,000 safety events reported across 55 hospitals, 373 ambulatory clinics, and 251 dental clinics (Ipsos Public Affairs, 2016). More than half of the cases reported were 'near misses', a third 'no harm', with 'patient harm' cases fluctuating from 7 to 10%. In addition to general safety reporting, leadership has focused on reduction of four major in-patient care events: wrong-side surgery, retained foreign objects, central venous bloodstream infections, and catheter associated urinary tract infections.

In order to engender a culture of safety and improve patient experience, staff need to feel comfortable communicating in an effective way. TeamSTEPPs[2], an AHRQ initiative, was one such approach that was adopted MHS-wide several years ago to mitigate communication failures and promote patient safety. During my 3-year posting in Europe, I was the physician champion for TeamSTEPPS. Our specific role was to improve inter-professional communication among inpatient providers, nurses, and technicians, as it related to surgical patient care. Similar to the civilian sector, the MHS is constantly trying to adapt to provide an improved individual care experience. In the end, both the customer (patient) and the MHS leadership are seeking value.

Improving the Health of the Population

The MHS goal in improving population health is to reduce the frequency of patient visits to hospitals and clinics (Medical Health System, 2017). The MHS has embraced the concept of moving from "healthcare to health." Whether military sponsor,

[1] www.health.mil
[2] https://www.ahrq.gov/teamstepps/index.html

dependent, or retiree, the patient is diverse by demographic and geography.

The MHS has embraced better health of the population through various programs. Over the past five years, the MHS has refocused efforts into making healthy choices easy and addressing health and social determinants across the DoD. This includes the military community where patients live, work, and leisure. The MHS has embraced the Healthy People 2020 national health goals to identify the most important preventive measures. This includes age appropriate mammography, pap tests, prenatal care, flu vaccination, blood pressure testing, and smoke cessation counseling (US Department of Health and Human Services, et al., 2000). For the past 3 years, the MHS has exceeded the benchmark for the HP 2020 target goals (DoD, 2017).

For the active duty population and their dependents, the MHS has organized a program titled Total Force Fitness. A holistic health strategy, the program links programs for mind, body, environment, and social wellness. The goal is a fit population that requires less direct medical care and is prepared to deploy as a healthy and ready force. Physical activity, nutrition support, family wellness, resilience training, and sleep hygiene are several important components to this program that have grown in popularity. Within Total Force Fitness, there are programs specific to women's health, child health, relationship skills, and goal setting strategies. Several areas within this program address several modifiable non-clinical risk factors that can improve the overall health of the population served.

The MHS has actively engaged in tobacco cessation for its served population. Counseling among those at risk has remained around 80%. Self-reported rates within the population have dropped from 15% in 2010 to 8% in 2016 (Ipsos Public Affairs, 2016). When examined by type of tobacco, it appears traditional forms have dropped yet smokeless products remain flat around 3% with room for improvement. Any TRICARE members older than 18 and non-Medicare eligible may receive tobacco cessation medications (both over-the-counter and prescription) free of charge. They are also eligible for free counseling as the MHS believes it is money well spent to prevent higher costs to the population served.

Given the relatively young age of the active duty military population, the MHS has launched several educational campaigns at reducing alcohol consumption. They use an evidence-based approach to combating alcohol abuse entitled, "Don't Be That Guy." The program is targeted at those between 18 and 24, the highest risk group for binge drinking. This campaign uses several modalities to increase awareness of the consequences of excessive drinking. Through multimedia, social media, and gaming, this program has a documented 60% penetrating in the at-risk population.

Building upon work in the total force fitness campaign, starting in 2013, Operation Live Well was launched as another effort at improving covered population health. This program is broader in scope and is intended to be utilized by all MHS beneficiaries. The program focuses on integrative wellness, mental wellness, nutrition, physical activity, sleep hygiene, and tobacco-free living. No available data has been published on its effectiveness.

In the case of the MHS, an ACO strategy is not directly applicable. However, in the past two years, the MHS began discussion about potentially sharing clinical resources with the Department of Veterans Affairs. In addition to clinical resource sharing, structurally sound interoperable health data transmission remains a challenge. This is especially the case as patients may move from the MHS system to the VA system with poor transmission of health data.

Reducing per capita Cost of Healthcare

According to the MHS mission statement, lower costs will be attained by eliminating waste by considering costs over time, not specifically focused on any individual healthcare activity. The MHS appears to be working on cost containment and per

capita cost reduction for healthcare delivery (U.S. Congress, 2016).

Not dissimilar to many organizations, pharmaceuticals are a major expense for the MHS. For TRICARE beneficiaries, with few exceptions there are no shared payments and the MHS assumes the full financial burden. Therefore, decisions about formularies are important as it relates to negotiated prices with drug manufacturers and retailers. Several years ago, both the DoD and VA brought a fraud suit against drug manufacturers and retailers who were overcharging TRICARE. This was either through direct purchase agreements or through the TRICARE claims system. Once it made its way through the appeals process and with assistance of the DHA, the MHS is now recouping hundreds of millions of dollars in drug recovery. In 2016, they recuperated $982 million from retail pharmacies, almost $7 million from duplicate claims errors, $70 million in court ordered settlements. This will be reinvested in the system to improve the care of the patient. In addition to pharmaceutical recovery, general TRICARE claims that were fraudulently submitted accounted for a large proportion of missed budgetary action. In 2015, more than $340 million dollars was recovered from fraudulent claim submission (Department of Defense, 2018, Feb 8).

At an operational level, through negotiated pricing and slight demographic shifts, the MHS realized a drug cost reduction of 7% over the past two years. Through aggressive renegotiation, retail pharmacy costs were reduced by 36% according to the most recent year-end report (Medical Health System, 2017). Through recoupment of fraud cases and renegotiation, the MHS has been able to recalibrate their budgets to now deliver drugs at a reduced cost to their patients.

In 2016, total out of pocket costs for MHS TRICARE beneficiaries under the age of 65 was a remarkable $565 and decreased by 6% from the previous year. This is a considerable cost savings when compared to most private insurance deductibles in the United States. In 2001, TRICARE drug benefits were added for seniors. Shortly thereafter, TRICARE for life was established for seniors older than 65 who wanted to use the benefit as supplemental insurance to minimize out of pocket deductibles and co-pays beyond Medicare. Over the years, many seniors have dropped other supplemental insurance in favor of TRICARE (for obvious reasons). Yet interestingly, 14% of those eligible continue to maintain other supplemental insurance at much higher rates. It is mostly likely that beneficiaries are unaware of the provisional no-cost benefit.

When the MHS reviewed outpatient patient visits, direct care costs increased 7% between 2014 and 2016. Those older than 65 had a 10% increase in cost when receiving direct patient care. However, the MHS has continued to make a concerted effort at balancing cost control with optimization of safety, quality, training, and readiness. One system metric used is the medical cost per enrollee. This metric focuses on the per capita costs to examine how well the MHS can remain below an annual target rate of increase based industry standards. In this case, they use the Kaiser Family Foundation and Health Research and Educational Trust to benchmark. In turn, this metric helps inform leadership about efficiency of direct care, demands for services from enrollees, and how well the MHS manages out of network care through contractual relationships. According to Maj Gen Clark, last year the MHS was 1% below the industry standard and projected to match the industry standard this fiscal year. According to Clark, the greatest cost savings are believed to be attributed to the adoption of the patient centered medical home. By reducing unnecessary emergency room visits and preventable hospital admissions, they are realizing lower spending.

When I began surgical training, MHS leadership often stated that military medicine was the ideal healthcare environment because we were unconstrained by insurance companies and would primarily focus on doing the “right thing” for the patient without consideration of finances. Although it is true that patients did not receive a bill, there was still a payer funding their care. In the end, that payer was the American public through federal tax

revenues. In the past two decades, the MHS and now DHA has matured into a system that is more cost conscious and has a core focus on affordable care delivery. Based on conversations with Lt. Gen. Robb (personal communication, 2017), it was estimated that prior to 2016, 15-25% of every dollar spent on healthcare was categorized as 'required for readiness/training'. This model was clearly not going to be sustainable, especially after the open checkbook approach from recent wars. From 2001-2014, massive infusions of funding to support military medicine permitted vast expansion without needs for a fiscally responsible budget. But after that funding stream ended in 2014, the reality of resource limitation and unsustainability returned. A provocative recommendation to reduce cost was introduced to the NDAA (Congress, U.S., 2016), made effective this year. According to Dr. Koehlmoos (personal communication, 2017), rather than limit annual growth, the MHS has been directed through the DHA to reduce the absolute overall budget by $2 billion per year for the next 3 years. Additionally, to consolidate administrative costs, starting this year TRICARE is being reorganized from three to two tiers. This should result in further cost reductions.

The Integrator Function

As described in the previous three sections, the MHS fully embraces each aspect of the Triple Aim. It reorganized its governance and healthcare business operations to align with the IHI initiative. As described by Lieutenant General Robb (personal communication, 2017), "the MHS mission is driven by the Triple Aim". According to Robb, "If any component cannot fit into the Triple Aim construct, it must be questioned." At a local level, the hospital commander and their leadership team take responsibility for assuring better care, better population health, and lower cost. In turn, they are accountable to the service Surgeon General, then DHA director, and finally the Under Secretary of Defense for Health Affairs.

Prior to 2017, there was no formalized mechanism for the Army, Navy, and Air Force medical systems to coordinate or collaborate with accountability. There was no incentive to standardize practices, collaborate in direct care, share resources, or coordinate purchased care in various markets. There was no systematic way to coordinate efforts to improve patient experience and lower costs. Now legislated, the USD/HA has complete authority to unify the three medical services into one under the Defense Health Agency. The goal of the DHA director is to strengthen partnerships within the services and provide the resources to foster a healthy population that the MHS serves.

The MHS recognizes a Quadruple Aim, but rather than traditional provider wellness, it has replaced it with Readiness. Readiness is at the core of the MHS Quadruple Aim for good reason. In the end, the purpose of the MHS is to provide a medically ready force to deploy and defend the United States. As health providers within the system, one could argue that we are part of the same community and therefore programs that target readiness should apply to all. Although not formalized across the system, there were pockets of provider wellness programs that I experienced while on active duty. While stationed in Europe many of us were caring for young and severely injured service members. We received resiliency training and hospital commanders organized "resiliency trips." They were organized trips to various local attractions in Europe where providers (nurses, physicians, pharmacists, technicians) would tour together as a group but clearly were away from the workplace for a shared mental break. It helped to build bonds with others in the group outside of the workplace who may have been having similar experiences. The goal was to help maintain focus and a highly reliable team. However, the turnover of military physicians and nurses remains high. The reasons are multifactorial, including pace of deployments, desire to start a family, aversion to frequent moves, and for financial reasons.

One strategy that has worked to both maintain personnel and integrate the 4th aim of "readiness" has been collaboration with civilian institutions. After the first gulf war, it was clear that military medics were unprepared to perform at the same level as they did in Vietnam. Yet, none of the

military facilities were actively treating injured patients. At that time, the military elected to embed military medical units within busy university hospitals for currency training (Thorson, C. M., et al. (2012). Although small in number, several have been sustained in centers of excellence around the United States. It was one of the reasons why surgical care was so successful during the Iraq and Afghan wars. For those given the opportunity to be stationed at such a center, it has facilitated provider retention (physicians, nurses, and technicians). It has served as great example of collaboration for readiness.

Recommendations

The Military Health System has made great strides over the past four years to integrate the Quadruple Aim into business plans, operational decisions, and patient care. The MHS has faced several challenges including deployment readiness, the aforementioned reorganization of governance in the NDAA 2017, and hurdles with the implementation of common business processes. It appears that there are clearly pockets of excellence within the MHS but there are clearly underperforming areas as well. Based on my assessment of the MHS, the following are recommendations to continue improvement:

Recommendation 1. Improve coordination of care through streamlined governance.

Prior to a detailed review of the military health system and now the creation of the NDAA 2017 (Congress, U.S. 2016), there was no platform to compel the various medical services to meet a single standard. Although the DHA remains the administrative head for both direct and purchased care, it appears that the medical services continue to execute strategies in non-uniform ways. The MHS should develop a common dashboard so that all direct care processes, quality metrics, and outcomes are similarly reported. Until such time that metrics align, it will be difficult to validate best practices and verify alignment with Triple Aim priorities. The USD/HA and DHA director must be capable to exert authority over quality and compliance to assure the patient experience is optimized.

Recommendation 2. Improve provider wellness.

Although readiness is at the core of the Quadruple Aim, no concerted effort to retain providers in the military health system exists. Not unlike other healthcare systems, military providers are tasked large empanelments and short patient visits. Droves of physicians and nurses are departing the MHS workforce. With an unstable workforce, it is difficult to maintain institutional excellence. Although there were resiliency programs at a single hospital in Europe during a war, it has not been translated to state-side care or consistently with any of the 52 hospitals within the MHS. When interviewing senior officials, they freely admitted that provider wellness has not been a high priority. Based on longitudinal data from personnel, the various consultants (administrators for each medical specialty) believe that they know the rate of attrition and expect to plan for it. Unfortunately, over the past five years the rate of departure accelerated beyond the predicted loss and now the MHS will ultimately have a provider shortage. This will, in turn, place great strain on the system. Optimal patient care delivery and quality may decline unless this is rectified. The MHS should examine strategies to improve provider retention. This may include re-examining work-life balance in the MHS. A good start would be to develop a specific climate survey within the provider community to assess where simple areas of improvement may lie.

Recommendation 3. Improve transparency to both patients and the public.

The MHS prides itself on high quality care for its managed population. The MHS is already participating in national benchmarking programs yet is often inaccessible to patients and health providers unaffiliated with the system. It also largely remains inaccessible to the general public. When it is available, it is often not granular enough to determine quality and value per hospital or provider. Despite the national security requirements for obscuring certain components of the healthcare of the active duty population, there remains room for web-based performance measures to be

accessible to patients. Further, large proportions of the beneficiary population do not have the security measure requirements (e.g., dependents and retirees). With greater transparency, quality, safety, and care delivery may be improved through performance improvement. It would also give patients more autonomy to understand their choices.

Recommendation 4. Collaborate with civilian partners to improve quality of care.

At the conclusion of Operation Iraqi Freedom and Operation Enduring Freedom (Afghanistan), the wealth of clinically experienced providers caring for ill and injured casualties already began to erode. Providers departed the military in vast numbers, leaving a current vacuum of experienced senior leaders who may mentor and maintain readiness in select fields. To maintain clinical competency and deployment readiness in certain fields, the MHS should partner with and embed providers in busy academic medical centers and the Veteran Affairs Administration. Hospitals would obtain funded and fully trained faculty and the military would gain the necessary clinical currency. This is not a new concept and has been quite successful in many similar military medical services in other countries.

Recommendation 5. Develop a single integrated electronic medical record system that is interoperable with the VA system.

The current electronic health record (EHR) system is disjointed and inefficient. In the direct medical care arena, there are four separate EHRs that are not interoperable. Even within systems, they are not uniformly networked across the MHS. Further, the MHS system does not adequately communicate with the Veteran's Affairs EHR. The MHS should develop a fully integrated EHR that is interoperable within the MHS, across the MHS, and with the VA system. This will result in cost reductions and waste elimination.

Recommend 6. Reduce patient no-show rate by 20% through increased accountability.

The negative aspect of a system with little or no copayment (e.g., active duty) is the ease of no-showing without consequence. This phenomenon has been reported to be upwards of 30% of all daily visits (D.R. Robb, personal communication, 2017). A missed appointment means a delayed appointment for patients in need. The MHS should develop a mechanism to reduce this number to less than 10%. Options include a nominal copayment or a penalty fee for no-showing. For those on active duty, failure to appear for a scheduled appointment without reasonable lead-time to cancel should result in a disciplinary action, even if minor. A large no-show rate negatively impacts the ability to adequately care for the larger population in need of services.

Conclusions

Although metrics are improving, there remains work to be done on improving patient experience across the MHS. Interestingly, Dr. Koehlmoos (personal communication, 2017) mentioned that health policy interns often ask her if the triple aim is merely a catch-phrase that general officers use. She replied that it's what the MHS lives daily. In my assessment, it is baked into the structure and mission of the modern MHS. The value sought by the MHS is

$$\frac{MHS}{Value} = \frac{Health\ Outcomes}{Cost\ of\ Delivering\ Healthcare\ services}$$

The Quadruple Aim is now integral to the organizational structure and every managerial decision is placed into this context (Koehlmoos, personal communication, 2017). Every manager and senior leader throughout the MHS is required to understand the construct of the Quadruple Aim. But it is not just top down, it must be bottom up as well. Every member of the MHS workforce must understand how the system is designed to not just provide healthcare but better health. For the deployable service member, better health is what the field commander demands. For the field commander, the value equation is slightly different:

$$\frac{MHS\ Commander's}{Value} = \frac{\text{Fitness of the force}}{Cost\ of\ \text{keeping the force fit}}$$

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