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NATIONAL HEALTHCARE REFORM: IMPLICATIONS FOR THE MILITARY HEALTHCARE SYSTEM

BY

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For decades, economists, forward thinking lawmakers and academicians have issued warnings that continued escalating healthcare costs and an aging population would lead to a day of fiscal reckoning. Today, healthcare spending exceeds $2.1 trillion annually hitting twice that spent on food.[i] Liberal benefits entailing little out of pocket expenses from the consumer lead the list of causes. Hospital and physician expenses experiencing little price discipline are at the heart of an emerging crisis in the American healthcare industry. Paralleling the civilian sector, department of defense medical costs have escalated, now threatening to exceed12% of the defense budget. Military leaders recognizing the link between open ended access to healthcare and excessive utilization, despite their warnings have met with stiff resistance from a broad coalition of lobbyists and elected representatives to implement reforms. The recent passage of the Patient Protection and Affordable Care Act (PPACA), injects an impetus toward change, however unless addressed comprehensively, the cost of healthcare will continue to rise independently from the stated goals of quality, equity, affordability. Regardless of its previous shortcomings, the Military Healthcare System (MHS) is unique as a large government run healthcare organization which could positively impact national healthcare reform.

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For decades, economists, forward thinking lawmakers and academicians have issued warnings that continued escalating healthcare costs and an aging population would lead to a day of fiscal reckoning. Today, healthcare spending exceeds $2.1 trillion annually hitting twice that spent on food.[1] Liberal benefits entailing little out of pocket expenses from the consumer lead the list of causes. Hospital and physician expenses experiencing little price discipline are at the heart of an emerging crisis in the American healthcare industry. Paralleling the civilian sector, department of defense medical costs have escalated, now threatening to exceed12% of the defense budget. Military leaders recognizing the link between open ended access to healthcare and excessive utilization, despite their warnings have met with stiff resistance from a broad coalition of lobbyists and elected representatives to implement reforms. The recent passage of the Patient Protection and Affordable Care Act (PPACA), injects an impetus toward change, however unless addressed comprehensively, the cost of healthcare will continue to rise independently from the stated goals of quality, equity, affordability. Regardless of its

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NATIONAL HEALTHCARE REFORM: IMPLICATIONS FOR THE MILITARY HEALTHCARE SYSTEM

Understanding the Problem

Once again, healthcare reform has come to the forefront of the American political stage. For decades, the rising cost of healthcare has oft been quoted as a major contributor to the economic downward spiral of the American economy. Adding to the challenge, political pressure to rein in costs, while at the same time increasing coverage to all Americans regardless of health or employment status has become a mainstream agenda. At the surface is the simple concept of fairness and equity. There are however, longstanding critical issues needing redress beyond the uninsured such as the efficient operation of current government health benefit programs, effective care delivery, chronic disease management, an aging population needing long-term care, the sustainability of healthcare financing, and new public health threats to name a few. Commenting on current Federal spending obligations, before passage of the Patient Protection and Affordable Care Act (PPACA), the White House Office of Management and Budget (OMB) reported that the projected long-term fiscal shortfalls facing American was primarily a product of escalating healthcare costs and warned that if these costs continued to grow at historical rates, Medicare and Medicaid would double as a share of Federal spending within the next 30 years. Economists argue that this growth rate is unsustainable and broad agreement exists that slowing the growth in healthcare costs is the single most important step to returning the nation to a firm fiscal footing.[2] Consensus though is lacking on how to achieve fairness, promote quality and curb the spiraling costs associated with the American healthcare system now staged to encroach further into the taxpayer's pocketbook.[3]

With Federal spending reaching unprecedented levels during this time of economic turmoil, Americans have much reason for concern. The Medicare and Medicaid Acts passed into law in the mid-1960s and early 1980s have concerning monetary histories. Initial Congressional Budget Office (CBO) projections for Medicare implementation in 1965 estimated that in1990 costs would conservatively come in at approximately $12 billion. In reality, the program consumed $110 billion in taxpayer revenues in 1990, fully nine times the initial estimate. And the dollar amount to cover the year 2010? Today, programmed to consume $450 billion, an unthinkable amount in 1965.[4, 5]

Medicaid estimates haven't fared much better. The disproportionate hospital benefit alone was projected to cost $1 billion over 5 years, yet the final tally came in at $17 billion.[6, 7, 8] In the meantime, Medicaid has grown into a $245 billion entitlement for the year 2010. All totaled the authorized mandatory outlays for federal health entitlements in 2010 are projected to hit $730 billion, but reaching $813 billion once the memorandum outlays of the American Recovery and Reinvestment Act are included.[9, 10] For the taxpayer, that is $5,891 apiece tagged to their 2010 tax bill.[11]

Initial estimates to implement the mandates contained in the PPACA, extending healthcare coverage to some 46 million additional beneficiaries, ranges from $829 billion to $1.2 trillion in new funding requirements.[12, 13] These estimates however do not include the cost of the individual mandate, which could balloon the total to over $2 trillion. Given the historical inaccuracies of OMB and CBO, this cost could be substantially higher.[14] Adding to taxpayer pain, one must also note that PPACA generated reductions on the deficit is predicated on increased tax revenues and

reduced outlays, both of which are best case hypothetical projections. [15] Concern is that the deficit may actually increase with PPACA implementation,[16, 17] and with current projections that by 2014 the interest on national debt alone will reach $516 billion, growing to $900 billion by the year 2020,[18] to the tax-payer that is an interest bill doubling from $3,739 apiece to $6,520 just to service interest payments.

Parallels and Paradoxes

Considering what Americans spend annually on healthcare and with the shifting of 46 million additional beneficiaries onto a tax dollar mandate, addressing the drivers of the escalating healthcare costs is important. It is an especially critical topic in light of America's waning economic health, which could be further threatened by additional entitlement spending.[19, 20]

It is instructive to look at the Department of Defense (DoD) Military Healthcare System (MHS). Although fundamentally different, the parallels to the private sector systems are informative, thought the MHS being a government run healthcare consortium. To achieve its mission, the MHS delivers care through a network of military clinics and hospitals, known as the direct care system or Military Treatment Facilities (MTFs), as well as more than 1,700 acute care civilian hospitals, 300,000 civilian physicians, and 60,000 pharmacies across the globe in its community-based or purchased care system.[21] Except for active duty personnel, beneficiaries can choose coverage from one of four plans offered by the MHS. [22] The out-of-pocket expenses borne by the individual increases in the different plans, being nominal with TRICARE Prime, which is modeled after civilian HMOs, and highest with TRICARE Standard, where the beneficiary has the broadest choice of treatment options, however assumes more finical risk. TRICARE for Life (TFL) was recently opened to eligible DoD

beneficiaries over age 65 and serves as a supplemental payer to Medicare. Subscribers to TFL must also enroll in Medicare to be eligible for this benefit.

Although small by comparison to Medicare and Medicaid, the MHS healthcare system now covers more than 9.5 million active-duty, retiree, and dependent beneficiaries currently enrolled in its various options.[23] It is a standalone example of equitable coverage, being unique in both its position as a government run healthcare organization and in being one of the largest delivery systems in the nation. Spending is reflected in the defense budget, and has unfortunately followed the same trends noted in the private sector, reaching some $44 billion in fiscal year 2009, and projected to hit $65 billion by the year 2015. Representing a full fivefold increase over a mere decade, and consuming over 12% of the defense budget, many defense analysts view this growth as potentially threatening future defense programs germane to America's long-term security interests.[24]

This trend was initially ascribed to the additional cost of caring for the sick and wounded over the past eight years of war. However, on closer examination a much more complex picture emerges. Increases in the cost of delivering medical services, in particular those associated with prescription drugs, physician and hospital services are trends reflected throughout the economy. Notably, the MHS extension into the civilian healthcare sector touches approximately 30% of healthcare providers and hospitals in the United States. Arguably then, those trends seen in the civilian sector would have a spill-over affect into the MHS. Skyrocketing pharmacy costs have seen the fastest rate of growth with annual per beneficiary prescription drug costs increasing between 8% and 11% per year over the 5 years from 2004 to 2009.[25, 26] Not surprisingly then for the

DoD, the establishment of TFL greatly increased a significant medical benefit to millions of higher cost Medicare-eligible retirees and their dependents who have demonstrated a higher utilization of multiple and higher cost medications.[27, 28] Secondly, the 2007 John Warner National Defense Authorization Act opened access to defense healthcare for certain non-active duty reservists and extended chiropractic care to active duty members placing yet additional pressures on defense health spending here-to-fore not seen. A third element was the elimination of TRICARE Prime co-payments and lowering of the catastrophic cap for retirees from $7,500 to $3,000 representing another healthcare benefit being shifted onto the defense budget.[29] It has been Congressional legislation expanding eligibility and entitlements to other sectors of the veteran population that has pushed up MHS healthcare spending.[30] When compared to other plans, including those available to civil servants under the Federal Employees Health Benefits Plan (FEHBP), observers note that the DoD provides a generous benefit with very limited contributions or co-payments required of beneficiaries. A Defense Health Board Task Force also reported that over the past decade, the multibillion dollar MHS system has been increasingly directed towards care of dependents, significantly expanding in the areas of obstetrics, pediatrics, and to the care of retirees at a stage of their lives when medical needs tend to increase. The report concludes that the bulk of current DoD medical spending goes to dependents and retirees, and not to the operating forces.[31]

But Jansen and Best have noted one other thing. On average TRICARE beneficiaries, both active duty and retired, tend to utilize professional healthcare services at a significantly higher rate than other sectors of the general population.

According to one estimate, in 2004 the TRICARE Prime outpatient utilization rate was 44% higher than in civilian HMOs and the inpatient utilization rate spiked at 60% higher than that seen in the civilian sector.[32] Healthcare analysts ascribe this trend to the lower contribution and out-of-pocket costs to TRICARE beneficiaries, a feature widely recognized as driving utilization and costs in other sectors of the American healthcare system where the true cost of care is hidden from the consumer.[33] [34]

But is this good or bad? Are the outcomes of care resulting from the higher utilization providing benefit in terms of longer disease and disability free lives? A number of recent studies suggest underutilization of medical services by sectors of the uninsured population, contributes to an estimated 20 to 45 thousand excess deaths per year in the United States.[35.] [36] Other studies however suggest that over-utilization increases the risk of medical errors leading to harm and perhaps contributes to an excess mortality quoted in the range of 98,000 to as many as 225,000 lost lives per year.[37] The lack of clear efficacy gleaned from utilization patterns such as seen in the MHS underscores the need to balance between these two seemingly opposite experience related endpoints.[38]

There is little doubt though about one effect of over utilization, it does drive up the net cost of healthcare.[39] Increasingly economists and healthcare policy experts question if the cost of healthcare in America, and by extension the MHS, provides a comparable return in terms of longer, disease and disability free lives. Cannon and Tanner argue that large productivity gains have been realized as a result of advances in medicine and suggest that much of America's healthcare spending is not wasted but is in fact very well spent. Quoting research estimating as much as a 14 to 1 return on the

dollar for general medical expenditures, 7 to 1 for cardiac procedures and 100 to 1 for pharmaceuticals, they claim that even if you take all the waste out of healthcare, spending would still go up because we have a technology-intensive system which will continue delivering net benefits in terms of longevity and quality of life. [40] Numerous other studies, although acknowledging the U.S. healthcare delivery system as amongst the best in the world and the world leader in medical innovation, question this conclusion. Collectively, according to one prominent study, despite the level of spending, adults in the United States receive the generally accepted standard of preventive, acute, and chronic care only about 55% of the time and suggest that the likelihood of patients receiving recommended care varies substantially according to the particular medical condition managed, ranging from 79% of that recommended for senile cataracts to a low of only 10.5% of recommended care for alcohol dependence. [41]

This cost benefit disconnect appears in several Medicare and Medicaid populations examined by the Cato Institute, a Washington, D.C. based think-tank, indicating that outcome does not appear to correlate with the overall level of spending. Several studies point to the somewhat paradoxical conclusion that Medicare patients are often less likely to receive recommended care in regions where Medicare expenditures are highest.[42, 43] Costs and services in these regions are mostly associated with end of life efforts vice care aimed at improving function and quality of life.[44] Studies looking at the MHS unfortunately point to similar trends where equality of access and coverage is theoretically widely achievable. Croghan notes that racial and ethnic disparities in child health exists across the country and are mirrored in the MHS population. Analyzing over 59,000 children their study found that for the cohort of

children enrolled in the MHS in 2007, having universal comprehensive coverage did not eliminate disparities in healthcare outcomes and appropriateness of care in children with asthma.[45] One can argue that given over half of the care delivered by the MHS is provided in its civilian purchased care sector,[46] it should not be too surprising to find such similarities. The standards of practice and referral patterns would reflect local norms versus that seen within military treatment facilities, and each reflecting a practice culture driven by the incentives provided within the system. All totaled, if appropriate care results in the maximum cost benefit as suggested by Tanner and Cannon, then one would expect the cost benefit ratio seen in the American healthcare system to be substantially higher than those studies noted.

Moving Forward: Addressing Cost Drivers and the Cost-Quality Paradox

Unfortunately, striking a balance between innovation, cost, quality, fairness, and outcomes both in terms of health status and satisfaction appears incurably elusive. Pulling these basic tenants together into a comprehensive healthcare reform initiative is a daunting task at best, and at worse, potentially self-destructive for the U.S. economy. A multi-pronged approach is needed. Already providing global coverage to its beneficiaries, the size, composition and extent of the MHS makes it a viable candidate to take the lead in healthcare delivery innovation and in shaping the healthcare reform environment. Readily identifiable are three broad areas where the MHS can play a significant leading role.

1. Implementing strategies to control costs.
2. Harnessing technology to improve quality decision making.
3. Concentrating purchasing power in strategic partnerships.

There are many explanations for the higher costs of U.S. healthcare, one being administrative overhead. The annual administrative cost of underwriting the current system and sale of policies to individual employers and self-insured individuals is estimated to exceed $145 billion. This does not include the cost to employers for purchasing and managing their employees' health insurance. One estimate suggests that the private employer insurance market consumes more than $50 billion/year in administrative costs.[47] With those 1,300 health insurance companies now lining up and vying for business in the newly evolving system, diverting taxpayer dollars away from private administrative overhead and profit into an efficient health benefit management system simply makes sense. Regardless of some initial shortcomings, the MHS is in position to template the future. [48]

This is not to suggest there needs to be a single payer system run by the government. But given the size and scope of the existing administrative overhead in the American system of healthcare delivery, there is likely substantial excess overhead and the need to have healthcare delivery and administrative support costs linked to optimal healthcare outcomes is virtually self-evident. By the same line of reasoning which forced expensive excess hospital capacity to be eliminated, administrative waste needs to be addressed. The MHS at the inception of TRICARE consisted of 135 medical centers and regional and community hospitals and more than 500 medical clinics worldwide. Unable to meet demand, the MHS supplemented the capacity of the military treatment facilities to meet the healthcare needs of beneficiaries by extending fixed price, at-risk contracts for managed care support divided amongst 12 regional contractors. Now entering its fourth iteration, reduced to three U.S.-based and one overseas region, the

MHS now operates 65 military hospitals and 412 military clinics. Partnered with the robust civilian network discussed above, the MHS is providing care for 9.5 million beneficiaries.

Validating a cost-benefit to this evolving partnership between civilian contractors and MHS regional commanders is a needed step in the right direction. If not for any other reason, saving even 25% of the identified administrative overhead currently borne by consumers of traditional health insurance plans, potentially soon to be unloaded on the taxpayer, would fund an entire year of healthcare in the MHS at current prices. [49]

A major effort to reform healthcare delivery reimbursement is needed and the MHS should re-address its move toward its current fee-for-service (FFS) based payment structure to MTFs, which simply mirrors private sector third-party payment mechanisms. Economists have long regarded third party health insurance as injecting a significant moral hazard into the system. This occurs when a party being insulated from risk behaves differently than it would behave if it were fully exposed to the risk. Because insured individuals no longer bear the full cost of medical services that they consume, they have an incentive not only to seek pricier and more elaborate medical services which are otherwise not necessary or provide only nominal benefit, but may inject ex-ante moral hazard into the equation through unhealthy lifestyles, in essence substituting healthcare for health.[50] This is amply demonstrated by the escalating costs in the MHS and is a trend noted in the civilian sector as well. The McKinsey Institute pointed out that between 1960 and 2006, the share of personal health expenditures paid directly out of pocket by consumers for their healthcare fell from about 47 to 13%. Conversely, the government's share of health care expenditures rose from 25 to nearly 50% over the

same period.[51] At the same time, lifestyle related medical problems have skyrocketed as has the use of expensive medical technology to mitigate the health effects.[52]

As noted in a 1994 CBO report, the absence of cost sharing out-of -pocket expenses in the MHS creates a big incentive leading to the observed higher utilization amongst its beneficiaries.[53] This re-imbursement mechanism gets even more complicated as it is one where neither party in the relationship has an incentive to reduce consumption despite a demonstrated lack of efficacy. Wilper identified three mechanisms by which insurance actually improves health: (1) getting appropriate care when needed, (2) having a regular source of care, and (3) continuity of coverage.[54] Fee-for-service arrangements obviously gets care to patients, however not necessarily appropriate care. Most physicians are not income maximizers, and certainly, this is true of military providers where each receives a flat salary. Even then, they know that it is by doing something that MTF receives additional resources and that patient expectations are often met by doing so. Having gone through the trouble of getting into the position of interacting with a provider, “no, let’s wait and call me in two or three days if this doesn’t resolve on its own” is very often an unacceptable answer.[55] And, the provider being rewarded by complexity and volume of services, has a strong financial motivation for doing what is often based on a slim clinical rationale for a given intervention.[56] Even low risk interventions have their downside as over-utilization creates yet another cost dilemma.

Statistically, more tests and procedures lead to greater medical misadventures through acts of commission, acts where the marginal gains were questionable from the onset result in greater expenditures at the back end in treating complications.[57] Cannon

and Tanner point out, third-party re-imbursements are paid regardless of outcome and in the case of avoidable medical misadventures, such payment tends to subvert the very market forces traditionally pushing other industries toward higher quality, lower consumer risk and lower cost.[58] Consequently, FFS arrangements tend to become payer-provider relationships which when injected into the patient – provider encounter entices both parties toward higher cost healthcare decisions. Satisfaction is maximized and third party reimbursement pays providers on the basis of volume and complexity of services rendered, independent of cost or outcome. This arrangement largely shields both patient and provider from what should be cost-benefit driven decisions at the margin and discourages shopping for value. On both sides then, there is relatively little price discipline injected into a given provider-patient encounter.

The Choices and Painful Trade-Offs

Correcting the situation predictably will be one of painful choices for the American public, and in particular for MHS populations where free care has become a somewhat standard expectation.[59] However, constraints imposed by escalating cost and lack of efficacy for much of the care received argue strongly that the beneficiary must become more aware of cost and a more astute consumer. Here again, the MHS could lead the way. In 1993, Congress established the current DoD sponsored managed care plan referred to as TRICARE with the goal of ensuring access to stable, high-quality healthcare services for eligible military beneficiaries and, to improve the efficiency of the military healthcare system. To accomplish these goals, the DoD proposed a new approach to delivering and financing healthcare that included both a system of capitated budgeting[60] and choice of benefits in the TRICARE options discussed earlier. Congressional direction to the DoD and MHS was to develop a uniform benefit option

modeled after civilian HMOs that would reduce out-of-pocket costs for enrollees and yet be budget neutral to the DoD, the latter effort however failing.[61, 62]

The underlying reason for this failure is obvious given the consumption patterns of MHS beneficiaries who, seeing little to no cost incumbent on their behavior, had no reason to moderate their expectations. Purely capitated re-imbursement however shifted the financial risk of providing healthcare services to providers while leaving the subscriber suspicious of the patient-provider relationship. Broadly, capitation tended to get a black eye in the press and amongst patients as a healthcare rationing scheme perpetuated by providers and insurers seeking to maximize their own profits and by providers who saw it as an inordinate risk and infringement on their professional judgment. This saw the MHS move back to FFS based re-imbursement of their MTFs.

Marmor and a panel of leading healthcare economists however suggest that placing caps on healthcare expenditures is the only mechanism for policy makers to ward off a potential financial collapse caused by the cost of the healthcare industry.[63] Capping budget outlays through enrollment based capitation strategies and providing incentives for patients to control utilization though co-pays seem a missed opportunity to achieve the original intent of the TRICARE legislation. As the evidence suggests, though reduction of co-pays may be politically appealing, their elimination can have a deleterious effect on the budget. The DoD and MHS might do well to experiment with matching health savings accounts (HSA)[64] where limited tax-free spending provides an incentive for patients to seek value in meeting current healthcare needs while building a financial base toward meeting their future healthcare requirements. Where FFS payments through third-party payers attenuate critical decision making responsibilities,

HSAs place the patient, in the form of market driven cost-benefit decisions firmly into the equation. Military beneficiaries would experience deductibles and co-payments; however those would be mitigated to some degree by the tax-free status of their contributions into HSAs.

The counterpart to this relationship is the provider. In normal markets, demand is modulated by cost and quality and consumers tend to demand high quality when making substantial purchases. As a result, most industries have an impetus to maximize quality at the lowest possible cost and make substantial financial commitments on their own part to ensure a quality product which competes for consumer choice. It is a situation of shared risk-taking which injects price discipline into the arrangement, but a condition yet to evolve in the healthcare sector. Caps on healthcare spending could be introduced though graduated or risk adjusted capitated payment packages which offer income predictability for providers and a cost-control mechanism to policy makers.

Central to any plan however, is the bond of trust which needs to be fostered between providers and patients. The key is in building shared risk and a shared decision-making platform where the patient does not feel shortchanged or leave providers feeling vulnerable to assuming inordinate risks over which they have no control. A combination of HSAs and capitated, or bundled re-imbursement presents the opportunity to achieve such a state. Capped payments would limit tax-based liabilities therefore federal funding requirements and tiered co-payments derived from patients will help mitigate the untoward risk assumed when accepting capped payments from the insurer. Both mechanisms drive providers to become competitive on cost, quality, and

satisfaction to gain enrollment, and both provider and patient have a vested interest in optimizing the patient's health status.

Harnessing medical information technology is another area in which the MHS has invested significantly in and is poised to contribute substantially to the reform initiative. Unfortunately, technological innovation in the healthcare industry tends to drive prices up vice down. Most experts believe that an electronic medical record (EMR) is not likely to change that, nor provide substantial cost savings in the absence of decision support features which assists both provider and patient at the point of care in making a cost effective decision.[65]

Designed to capture the complexity and intensity parameters necessary for the MHS to be remunerated for the services provided AHLTA,[66] the military's electronic health record, is an enterprise-wide medical information system that provides secure online access to MHS beneficiaries' records by medical clinicians in all fixed and deployed MTFs worldwide. Sporting a centralized data repository ostensibly allows healthcare personnel to access complete, accurate health data to make informed patient care decisions at the point of care, anytime, anywhere.[67] AHLTA however, has a number of significant shortcomings that have been the subject of hot debate.[68] For one, it does not communicate with other electronic medical databases developed by the DoD or the VA. Neither does it tie the computerized records into anything resembling a "smart medical information grid" where experience and a growing knowledge-base existent in the enterprise are brought to the point of care. [69] It is really rather static in that it is essentially an event-based information gathering tool not entirely unlike the old paper medical record. Producing value in terms of developing optimal treatment

strategies at a lower cost was not part of the initial design strategy. However, in all fairness neither was most other EMR entering the market at the time. And unfortunately, decision support has remained largely an afterthought in the EMR domain.

The strength of AHLTA however is its user base. Nationwide, fewer than three percent of hospitals and less than fifteen percent of physicians have adopted electronic record keeping.[70] The DoD though has a generation of physicians transitioning from paper to electrons. This is the first step toward developing a smart medical grid where an EMR becomes an integrated clinical decision support tool, not simply an electronic repository of what used to be a paper record. The most fundamental factor influencing good medical care is making an optimal decision supporting the patients' medical need. However, a medical industry geared more for patient throughput, not decision making, undermines quality at a critical point in a patient encounter. It is estimated that during fifty percent or more of primary care visits, additional information being readily available would have led to better treatment decisions.[71] A reversal of the concept of throughput of patients needs to give way to decision throughput in a point of care environment where optimizing decisions can be made at a speed approaching that of thought and linking the patient to the highest quality, lowest cost alternatives.[72] Accomplishing this will be a rather radical departure from the traditional concept of what a medical record, electronic or not, currently functions as.

In primary care especially, a smart medical information grid in concept brings together actionable data from multiple sources germane to the medical issue being dealt with at the point of care. It is not necessarily seeing the provider as much as it is the decision management process that garners this benefit. The system needs to

incentivize shared decision making along this line vice churning volumes of patient throughput. The most efficient patient-provider interaction could entail something as simple as a secure e-mail or recorded phone call to that of harnessing the internet and telehealth technology, such as seen with the Veteran Administration's (VA) experiment with "Health-Buddy". This device is designed to remotely acquire biometric information from a patient which is then analyzed by healthcare providers who then arrange appropriate care. The VA experience suggests that such telehealth devices can economize chronic disease management, gaining efficiencies and quality at a lower cost where traditional practice encounters fail.[73] In this context, the EMR takes on a much more active role in day to day management and requires a rethinking of its design. Open source options bringing together a hybrid of "best of breed" technology developments and unified databases, such as AHLTA or the Veterans Administration's VistA,[74] into a highly functional clinical decision support environment can reap many benefits while also building decision support content through harnessing successes and the knowledge capital existent elsewhere within the enterprise.[75]

Finally, analysts note that other rich democracies concentrate purchasing power to counter the medical industry's tendency toward increasing costs.[76] The DoD is a microcosm of these rich democracies and the overall MHS medical costs are on the public budget. DoD officials then have a powerful incentive to restrain further increases in medical costs to avoid reducing funds to other critical programs. The opportunity and challenge then for the DoD and MHS is to find a way to cap healthcare expenditures while improving outcomes, access and satisfaction. Here size matters, and with its potential for centralizing purchasing power and governance, along with approximately

17 million enrollees, [77, 78] a MHS-VA partnership would certainly make a difference, but only if it can first manage it is financing toward a common goal, continue striving toward providing choice at the best value for the patient and grow to the challenge. Hendricks's cost analysis of the VA certainly suggests that high quality care and cost containment are not incompatible.[79] The MHS is already positioned to experiment with a strategic partnership and the combined purchasing power of both organizations offers a potential counterbalance to the observed tendency for healthcare costs to escalate out of proportion to other sectors of the economy.[80, 81] Getting there though promises to be a rocky road. At the interagency level, there must be a design priority set and a guiding principle that charts the course toward a sustainable future for both organizations. Millions of Americans have served in the armed forces and represent a potential market force that if given the option, might choose to receive their healthcare from either the MHS or VA, an effect that could have a positive effect on the American healthcare system as a whole.[82]

Conclusions

For better or worse, the passage of PPACA will reshape healthcare delivery in the United States. With its sheer size and degree of integration into the civilian sector and growing partnership with the VA, the MHS can play an important role in shaping that future. However to be successful, healthcare reform must start with the core patient-provider encounter. The partnership most involved in making healthcare decisions has an obligation to maximize well-being and its incentives re-aligned in terms of health and wealth. HSAs provide one option where patients are incentivized to spend wisely on healthcare while savings growth overtime mitigates the cost of future healthcare requirements.[83, 84] Providers incentives must also be changed and the

provider-patient relationship enhanced by an integrated work platform that maximizes the decision process while reducing uncertainty, cost and the work demand to get there. Lastly, a MHS-VA partnership is potentially value added to veterans of all ages. It is not unrealistic then to expect consolidation of administrative overhead, realignment of incentives for both patient and provider and strength in numbers to over-time, put significant downward price pressure on healthcare to the benefit of everyone.

Endnotes

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[4] Steven Hayward, Erik Peterson. "The Medicare Monster; A Cautionary Tale". *Reason* Magazine January 1993. Retrieved from: http://reason.com/archives/1993/01/01/the-medicare-monster/

[5] Medicare Spending and Financing. Medicare factsheet. *Kaiser Foundation*. May 2009. Retrieved from http://www.kff.org/medicare/upload/7305-04-2.pdf

[6] Sen. Judd Gregg (R-NH), Member, Senate Budget Committee, Jagadeesh Gokhale, Cato Institute, and John Holahan, Urban Institute. *Medicaid's Soaring Costs: Time to Step on the Brakes. Capitol Hill briefing.* Thursday, July 19, 2007. Cato senior fellow Jagadeesh Gokhale estimates that the discounted present value of just federal Medicaid spending over the next 100 years equals $21 trillion. If the federal government continues to match state Medicaid outlays at the current rate, by the year 2106 Medicaid alone will consume 13 percent of GDP — eight times its current share. Gokhale argues that limiting the growth of Medicaid spending is essential to restoring the federal government's financial health.

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over the next 10 years, reaching $674 billion by 2017. That compares to a projected rate of growth of 4.8 percent in the general economy.

[8] Daniel J. Mitchell. Senior Fellow, CATO Institute. *Obamacare, the budget buster*. http://www.cato.org/people/daniel-mitchell

[9] Federal Department of Health and Human Service. *Budget proposal FY 2010*. http://www.gpoaccess.gov/usbudget/fy11/pdf/budget/health.pdf

[10] Mandatory spending includes federally enacted entitlements such as Medicare, Medicaid, Social Security, and defense spending and also includes interest payments on Federal debt. See: http://en.wikipedia.org/wiki/United_States_federal_budget; Mandatory spending is also expected to increase as a share of GDP. According to the Heritage Foundation, spending on Social Security, Medicare, and Medicaid will rise from 8.7% of GDP in 2010, to 11.0% by 2020 and to 18.1% by 2050. Since the federal government has historically collected about 18.4% of GDP in tax revenues, this trend suggest that these three mandatory programs may absorb all federal revenues sometime around 2050. See: http://www.heritage.org/BudgetChartbook/federal-spending

[11] Based on 2007 census data showing 138 million Americans filing returns. Retrieved from: http://en.wikipedia.org/wiki/Taxation_in_the_United_States

[12] CNN Politics.com. "Agency predicts healthcare bill will cost $829 billion". October 7, 2009. http://edition.cnn.com/2009/POLITICS/10/07/health.care/index.html?eref=rss_topstories&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rss%2Fcnn_topstories+%28RSS%3A+Top+Stories%29

[13] Noam N. Levey. "Obama to outline $313 billion in Medicare, Medicaid spending cuts". *Los Angelis Times*. 14 June 2009.

[14] Michael F. Cannon. "The Price of Obamacare". 12:49 min. CATO Institute podcast. 23 March 2010.

[15] Letter from Douglas W. Elmendorf , Director CBO explains the cost savings in a letter to Senator Jeff Sessions, 22 January 2010. http://www.cbo.gov/ftpdocs/110xx/doc11005/01-22-HI_Fund.pdf

[16] Joe Jarvis. "PPACA: Nuking the Federal (and State) Budgets". *Utah Healthcare Initiative*. 12 May 2010. http://utahpatientspac.blogspot.com/2010/05/ppaca-nuking-federal-and-state-budgets.html

[17] Robert Doherty. "The Certitudes and Uncertainties of Health Care Reform". *Annuals of Internal Medicine*. 8 April 2010. http://www.annals.org/content/early/2010/04/05/0003-4819-153-1-201007060-00235.full

[18] Richard Wolf. "A soaring debt and painful choices". *USA Today*. Tuesday 13 April 2010. Actual projections are based on President Obama's 2020 budget proposal.

[19] PPACA calls for regulations of the health insurance industry and real changes, such as guaranteed issue, guaranteed renewability, exclusion of preexisting conditions, and limited risk

rating. It also calls for expansion of the Medicaid program, not only expansion for women and children, which has been in there before, but for men and other categorical groups. There are four other provisions which could expand taxpayer liability. The individual mandates and employer mandates. That is to say, individuals will be required to purchase insurance or pay penalties, and employers of a certain size members or a certain size payroll will be required to purchase insurance or contribute towards it in another way. The proposed subsidies for individuals to help purchase insurance, up to 400% of the poverty line, and for small employers who are willing to go out and buy insurance, there'll be tax credits, costs of which are shifted to the taxpayer. Perspective Roundtable: *Health Care Reform in Perspective*. Downloaded from www.nejm.org on February 20, 2010.

[20] Niall Ferguson. "Complexity and Collapse: Empires on the Edge of Chaos". *Foreign Affairs*. March/April 2010. PP18-32. Of particular note is the theme of economic over extension contributing to the demise of empires. P 19-20

[21] Jansen, Don J. "Increases in TRICARE Costs: Background and Options for Congress". *Congressional Research Service, Library of Congress*. May 2009.

[22] Ibid. Care is now delivered through one of four plans. The first is TRICARE Prime, a health maintenance organization (HMO), which is required for active duty personnel and open to dependents and many retirees. Two other plans are TRICARE Extra, a preferred provider option in which beneficiaries seek care from providers who have agreed to an established fee structure, and TRICARE Standard (formerly CHAMPUS) in which beneficiaries can seek care from any licensed provider and obtain partial reimbursement. A fourth plan, TRICARE for Life (TFL), serves as a supplemental payer to Medicare for care rendered by licensed providers. Prescriptions are available from military pharmacies at no cost; they can also be obtained from civilian pharmacies linked to DOD or by mail order with relatively low co-payments (e.g., $3 for a generic prescription; $9 for a brand; $22 for a non-formulary prescription). Special versions of these plans for beneficiaries in overseas and remote areas are also available.

[23] U.S. Office of Budget and Management. *Department of Defense budget for FY2011* http://www.gpoaccess.gov/usbudget/fy11/pdf/budget/defense.pdf

[24] Jenson.1.

[25] "Drug Prices Soar. Report shows dramatic increase in 2008". *AARP Bulletin Today*. April 16, 2009. <http://bulletin.aarp.org/yourhealth/medications/articles/ the_high_cost_of_ drugs3.html>

[26] Report to Congress. *Department of Defense, Evaluation of the Tricare Program, FY2009*. April 6, 2009, p. 80, http://www.tricare.mil/planning/congress/downloads/TRICARE%20 Program%20Effectiveness%20(FY09).pdf.

[27] Andrea Linton et al. "Examination of Multiples Medication Use Among TRICARE Beneficiaries Aged 65 Years and Older". *Journal of Managed Care Pharmacy.* March 20077 Vol. 13. No 2. http://www.amcp.org/data/jmcp/p155-62.pdf. In the study, Andrea notes primarily brand name medications being prescribed for treatment of osteoporosis, enlarged prostate, gout, asthma, and seasonal allergies, as well as anticlotting agents. These agents have significant cost differences to generic brands. P 157.

[28] CM Roe, AM McNamara, BR Motheral. “Gender and age related prescription drug use patterns”. *The Annals of Pharmacotherapy*: Vol. 36, No. 1, pp. 30-39.

[29] Richard Best Jr. CRS Report for Congress. “Increases in TRICARE Costs: Background and Options for Congress”. May 6, 2008. http://www.policyarchive.org/handle/10207/bitstreams/20103.pdf

[30] Ibid: See Defense Authorization Acts (P.L. 106-398, P.L. 108-375 and P.L. 109-163).

[31] Defense Health Board, Task Force on the Future of Military Health Care, December 2007, page 13.

[32] Report to Congress . Department of Defense. *Evaluation of the TRICARE Program: FY2005,*.March 1, 2005, pp. 63, 57.

[33] Jansen. 2

[34] Michael F. Cannon and Michael D. Tanner. *Healthy Competition. Whats holding back Healtcare and How to Free it.* Second Edition. CATO Institute. Washington DC. Kindle version: Chapter 4. Too Much of a Good Thing Can Be Very Bad. Locator 538-689

[35] Andrew P. Wilper, MD, MPH, et al. “Health Insurance and Mortality in U.S. Adults”. *American Journal of Public Health*. December 2009, Vol 99, No. 12

[36] Michelle Andrews. “Deaths Rising for Lack of Insurance, Study Finds”. *The New York Times*. February 26, 2010. http://prescriptions.blogs.nytimes.com/2010/02/26/deaths-rising-due-to-lack-of-insurance-study-finds/. This article outlines a number of studies, some subsequently suspect as being primarily politically motivated, however does raise valid questions about access to affordable care contributing to preventable morbidity and mortality.

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[38] V.Shalev, G.Chodick, A.Heymann, E.Kokia. “Gender differences in healthcare utilization and medical indicators among patients with diabetes”. *Public Health*, Volume 119, Issue 1, Pages 45-49

[39] Ezekiel J. Emanuel, MD, PhD, Victor R. Fuchs, PhD. “The Perfect Storm of Overutilization”. *JAMA*, June 18, 2008—Vol 299, No. 23. 2789-2791.

[40] Cannon and Tanner. Chapter 1. Is spending more necessarily bad? Locator 257-59

[41] McGlynn, Elizabeth A. et al., "The Quality of Health Care Delivered to Adults in the United States" *NEW ENG. J. MED*. 2635 (2003); See also Steven M. Asch et al., "Who Is at Greatest Risk for Receiving Poor-Quality Health Care?, *NEW ENG. J. MED*. 1147, 1147 (2006) (Overall, participants received 54.9 percent of recommended care. There was only moderate variation in quality-of-care scores among socio-demographic subgroups).

[42] Ibid. Chapter 6.

[43] Michael F. Cannon. "Pay-for-Performance: Is Medicare a Good Candidate?" *YALE JOURNAL OF HEALTH POLICY, LAW, AND ETHICS* VII:1 (2007). 1-4

[44] Katherine Baicker, Amitabh Chandra: "Medicare Spending, The Physician Workforce, And Beneficiaries' Quality of Care." *W4 Health Aff. - Web Exclusive*, April 7, 2004, at W4-184, W4-192, http://content.healthaffairs.org/cgi/reprint/hlthaff.w4.184v1.pdf, States that spend more per Medicare beneficiary are not states that provide higher quality care. In fact, additional spending is positively correlated with end-of-life care but negatively correlated with the use of effective care. See also Fisher et al., Part 1, supra note 3, at 273. Quality of care in higher-spending regions was no better on most measures and was worse for several preventive care measures; *id.* at 283 (reporting that for seven out of ten types of recommended care, Medicare spending within a hospital referral region was inversely related to the quality of care).

[45] Thomas Croghan, Kristen Purcell, and Kate Stewart. "Practical Lessons for Health Reform from the Military Health System".. *Mathematica Policy Research Inc*. November 2009. Number 6. 2-3.

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[47] Angrisano C, Farrell D, Kocher B, Laboissiere M, Parker S. "Accounting for the Cost of Health Care in the United States." *McKinsey Global Institute*, 2007. http://www.mckinsey.com/ mgi/rp/healthcare/accounting _cost_healthcare.asp. Accessed May 30, 2008.

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[49] Capital Hill Briefing. Michael Tanner. "Understanding Healthcare Co-ops". CATO institute Podcast. 9 Sept 2009. . Tax supported subsidies to finance the individual mandate would by default have to cover the administrative overhead and underwriting expenses both existent and created by the new legislation. Underwriting costs could be eliminated, however at a much higher cost to individuals otherwise at low health risk.

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[52] "Top 10 Health Problems in America. Mayo clinic report indicates that 7 of the top 10 illness affecting Americans have a lifestyle contribution which can be mitigated to a large extent by adopting healthy lifestyle habits". http://www.livestrong.com/article/36536-top-health-problems-america/

[53] Neil M. Singer , Acting Assistant Director, National Security Division, Congressional Budget Office on reforming the Military Healthcare System. April 19, 1994. "Beneficiaries and providers in the military health care system face few incentives to economize on care. Two factors are largely responsible for this situation: a benefit structure with low cost-sharing requirements that encourages excessive use by patients, and a paucity of constraints on providers to curb the delivery of unnecessary and inappropriate health care. These problems are compounded by the interplay between the services' wartime and peacetime missions".

[54] Wilper. 2.

[55] Debora A. Paterniti, PhD, Tonya L. Fancher, MD, MPH et al. "Getting to "No": Strategies Primary Care Physicians Use to Deny Patient Requests". *Arch Intern Med.* 2010;170(4):381-388.

[56] Ezekiel J. Emanuel, MD, PhD; Victor R. Fuchs, PhD. "The Perfect Storm of Overutilization. ". *JAMA.* 18 June 2008; Vol. 299 No 23: 2789-2791. Many factors influence provider behavior. Time pressures and patient expectations come together to for a "perfect storm" which often leads to low risk but unnecessary tests and procedures. See also: Susan Williams et al. Patient expectations: What do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction? Family Practice Vol. 12, No. 2, 193-201. Oxford University Press 1995

[57] Schuster. "Mortality statistics do not reflect the extent of the problem. The most common medical malpractices are attributed to medication errors, which affect almost 1.5 million people annually". *Medical Malpractice Statistics*: http://www.buzzle.com/articles/medical-malpractice-statistics.html

[58] Cannon and Tanner. Chapter 2. Real Problems. Locator 321-52

[59] Singer. 3.

[60] Capitation is a payment method for health care services where the physician, hospital, or other health care provider is paid a contracted rate for each member assigned and often referred to as a "per-member-per-month" rate accepted regardless of the number or nature of services provided. The contractual rates can be adjusted for age, gender, illness, and regional differences in cost, illness prevalence etc.

[61] Ibid. 6-7.

[62] GAO. 2.

[63] Theodore Marmor et al. “The Obama Administration's Options for Health Care Cost Control: Hope Versus Reality”. *Annals of Internal Medicine*. April 7, 2009 vol. 150 no. 7 485-489

[64] Health savings accounts (HSA): These are tax-advantaged medical savings accounts available to taxpayers in the United States who are enrolled in a High Deductible Health Plan (HDHP). The funds contributed to the account are not subject to federal income tax at the time of deposit. Unlike a flexible spending account (FSA), funds roll over and accumulate year to year if not spent. HSAs are owned by the individual, which differentiates them from the company-owned Health Reimbursement Arrangement (HRA) that is an alternate tax-deductible source of funds paired with HDHPs. HSA funds may currently be used to pay for qualified medical expenses at any time without federal tax liability or penalty.

[65] Goldhill, David. “How American Health Care Killed My Father”. *The Atlantic Monthly*, September 2009. http://www.theatlantic.com/magazine/archive/2009/09/how-american-health-care-killed-my-father/7617/5/. Mr Goldhill notes the Rand Corporation study estimating that the widespread use of electronic medical records would eventually yield annual savings of $81 billion, while also improving care and reducing preventable deaths and the White House estimates that creating and spreading the technology would cost just $50 billion. He argues however that this technology would be effective only if properly applied. Most physicians and health-care companies haven’t adopted electronic medical records on their own, and will not do so unless there is a benefit of the technology (record portability, a reduction in costly and dangerous clinical errors) that accrues to patients, not necessarily just to providers. In a consumer-facing industry, this alone would drive companies to make the investments to stay competitive. But patients aren’t the real customers in the American scheme and government funding of electronic records wouldn’t change that.

[66] Armed Forces Health Longitudinal Technology Application, AHLTA is a $5 billion DoD-wide hospital information system replacement for the $1.6 billion Composite Health Care System (CHCS) system.

[67] “Introduction to AHLTA. The Defense Health Information Management System.” http://dhims.health.mil/userSupport/ahlta/about.aspx.

[68] Bob Brewin. “A New VistA for AHLTA”, *Redux*. 20 Feb. 2009. < http://whatsbrewin.nextgov.com/2009/02/a_new_vista_for_ahlta_redux.php> See also a number of Bloggs using keyword search: AHLTA complaints.

[69] Vijay Vaitheeswaran. “A special report on health care and technology. Medicine goes digital.” *The Economist*. 18 April 2009. See also: ICMCC review blog. http://articles.icmcc.org/ 2009/04/18/a-special-report-on-health-care-and-technology-the-economist/

[70] Carter, Jerome H. *Electronic Health Records. A Guide for Clinicians and Administrators*. Second Edition. ACP Press. 2008. 5.

[71] Ibid: Why Do Clinical Decision Support? 195-196.

[72] Ibid: 195. Studies estimate that it would take approximately 43 minutes to satisfactorily research and answer clinical questions that might arise during a patient encounter. See Gorman,et al: Can Primary Care Physician’s Questions be Answered Using the Medical Journal Literature? Bull. Med. Libr. Assoc. 1994; 82:140-6.

[73] "HEALTH HERO NETWORK SAYS RECENT SUCCESSES OF DEPLOYMENTS WITH MEDICARE, VA SIGNAL NEW ERA OF TELEHEALTH". Successful Multi-Year Trials at VA, Medicare Show Telehealth-based Health Care Interventions Can Improve Care, Reduce Costs https://www.healthhero.com/press/press_releases/pr_01_23_09.html

[74] VistA is a collection of about 100 integrated software modules making up a electronic health record and health information system originally developed by the U.S. Department of Veterans Affairs (VA) for use in its veteran's hospitals, outpatient clinics, and nursing homes. The VistA system is public domain software and available through the Freedom of Information Act directly from the VA or through a growing network of distributors. WorldVistA which is a development effort aimed at extending and collaboratively improving the VistA electronic health record and health information system for use outside of its original setting. http://worldvista.org/AboutVistA and: http://en.wikipedia.org/wiki/VistA

[75] Carter:. 7-17, 193-212.

[76] White J. "Competing Solutions: American Health Care Proposals and International Experience". *Brookings Institution Washington, DC*; 1995.

[77] Congressional Budget Office . *The Health Care System for Veterans: An Interim Report*. 2007. Department of Veterans Affairs. http://www.cbo.gov/ftpdocs/88xx/doc8892/MainText.3.1.shtml

[78] Ibid. In addition to the 7.9 million veterans currently enrolled, VA estimates that 5.8 million veterans who are not enrolled would be eligible to receive medical care from the VA health system if they applied and that about 10.2 million veterans would be classified in priority group 8, for which new enrollment has been frozen since January 2003. MHS size is estimated at 9.5 million.

[79] Ann Hendricks et al. "More or Less? Methods to Compare VA and Non-VA Health Care Costs." *MEDICAL CARE* Volume 37, Number 4, pp AS54–AS62*, VA Supplement:* This study suggests that over the study period, VA costs appear to have been significantly lower than fee-for-service charges that the federal government might have to pay if veterans were treated in private sector hospitals for the same diagnoses.

[80] Ibid. Box 3. Factors Affecting Medical Spending by the Department of Veterans Affairs. Adjusting for the changing mix of patients (using data on reliance and relative costs by priority group), the Congressional Budget Office (CBO) estimates that VHA's budget authority per enrollee grew by 1.7 percent in real terms from 1999 to 2005 (0.3 percent annually). Though not the decline in cost per capita that is suggested by the unadjusted figures, that estimate still indicates some degree of cost control when compared with Medicare's real rate of growth of 29.4 percent in cost per capita over that same period (4.4 percent per year).

[81] Jonathan Oberlander PhD. Professor, Social Medicine and Health Policy & Management, University of North Carolina. Chapel Hill; adjunct professor, Dept of Political Science. Interviewed by Dr Michael Berkowitz, Deputy editor; Annals of Internal Medicine. Healthcare cost control. Annals Podcast. 3 March 2009. Dr Oberlander suggests it would take 40-50 million enrollees into a healthcare option where purchasing power is centralized in order to put effective downward pressure on and globally affect healthcare prices in the United States.

[82] Phillip Longman. "Best Care Anywhere: Why VA Health Care Is Better Than Yours" *PoliPointPress*, Sausalito, Calif.: 2007, p. 5; "The Best Medical Care in the U.S.," *BusinessWeek*, July 17, 2006; David Brown, "VA Takes the Lead in Paperless Care," *Washington Post,* April 10, 2007, p 4. These and other studies suggest that the health care cost per patient or enrollee has remained relatively stable for the Department of Veterans Affairs (VA), while the costs faced by Medicare and other health plans have risen faster than general inflation.

[83] Cannon and Tanner. Chapter 5. Tax Policy and Healthcare. Locator 695-776

[84] Michael F. Cannon. "Large Health Savings Accounts: A Step toward Tax Neutrality for Health Care". *Forum for Health Economics & Policy*. Vol 11, Issue 2 Article 3. 2008. 15-21.