Medical Joint Cross-Service Group

Summary of Selection Process

Introduction

The Medical Joint Cross-Service Group (JCSG) was chartered to review Department of Defense healthcare functions and to provide base closure and realignment (BRAC) recommendations based on that review. Assigned functions included Department of Defense (DoD) Healthcare Education and Training; Healthcare Services; and Medical and Dental Research, Development and Acquisition (RD&A). The Air Force Surgeon General chaired the Medical JCSG, and other principal members included senior medical members from the Military Departments, the Joint Staff, and the Office of the Secretary of Defense (OSD). The summary that follows details the group's strategies, processes, and recommendations for consideration for of 2005 BRAC Commission.

Responsibilities and Strategy

The Medical JCSG was responsible for a comprehensive review of its assigned functional areas, an evaluation of alternatives, and the subsequent development and documentation of realignment and closure recommendations for the Secretary of Defense. In developing its analytical process, the Medical JCSG established internal policies and procedures consistent with DoD policy memoranda, the force structure plan prepared by the Chairman of the Joint Chiefs of Staff, an installation inventory, BRAC final selection criteria, and the requirements of the Defense Base Closure and Realignment Act of 1990, as amended.

The Military Healthcare System (MHS) must ensure that DoD has trained, proficient, and deployable medics to support the warfighter. In addition, DoD must foster and deliver research, development and acquisition of unique military medical and dental technology and techniques. In its current form, the DoD healthcare delivery system accomplishes this mission through two complementary organizations: the Direct Care System which includes military treatment facilities, and the TRICARE health benefit program which provides access for beneficiaries to the civilian healthcare system.

The Medical JCSG developed key strategies to guide deliberations based on the key objectives above. These strategies came from an analysis of the BRAC final selection criteria criteria. The Medical JCSG focused its efforts on:

- Supporting the warfighter and their families in-garrison and deployed;
- Maximizing military value while reducing infrastructure footprint, while maintaining an adequate surge capability;

- Maintaining or improving access to care for all beneficiaries, including retirees, using combinations of the Direct Care and TRICARE systems;
- Enhancing jointness, taking full advantage of the commonality in the Services' healthcare delivery, healthcare education and training, and medical/dental research, development and acquisition functions;
- Identifying and maximizing synergies gained from collocation or consolidation opportunities; and
- Examining out-sourcing opportunities that allow DoD to better leverage the large U.S. health care system investments.

The group's final recommendations were based on a review of the entire Military Healthcare System, including the TRICARE program, with a view towards advancing these strategies. To facilitate efforts, the group developed categories of functions for evaluation and organized into subgroups corresponding to these functions. Each subgroup, in turn, developed strategies for evaluating its functions. These strategies were based on the Medical JCSG key focus areas and guided by BRAC selection criteria 1-8.

Analytical Process

The Medical JCSG approach to the BRAC process involved iterative and concurrent actions in close collaboration with the Military Departments and the other Joint Cross Service Groups. The Medical JCSG Principals formed the deliberative body; subgroups generated ideas, proposed overall scope for analyses and brought forth recommendations for consideration. All data collection was conducted and certified in accordance with BRAC process guidance.

The Medical JCSG developed attributes and metrics proposed by subgroups to determine the capacity of all installations for its assigned functions. The metrics were used to develop questions designed to solicit necessary data, which were subsequently issued to all DoD installations in the form of a controlled data call.

The Medical JCSG used the responses from the installations (submitted in the form of certified data) to perform a capacity analysis and review surge requirements. At each step in the process, adequacy and quality of the data was independently validated by the DoD Inspector General.

Once the group acquired capacity information, it conducted a military value assessment of each function at each installation. The group developed military value data call questions from BRAC selection criteria 1-4 to generate data for the quantitative portion of military value which includes both quantitative data, as well as military judgment. Using each installation's responses, the Medical JCSG subgroups identified realignment or closure scenarios that corroborated their strategies and were supported by data. The Medical JCSG believed these scenarios would advance jointness, achieve synergy, capitalize on technology, exploit best practices, and minimize redundancy, while maintaining the fundamental healthcare mission of the DoD. Once scenarios were developed, the remaining selection criteria (criteria 5-8) were assessed, using standard DoD's procedures and/or models.

The Medical JCSG approved 22 candidate recommendations for presentation to the Infrastructure Steering Group (ISG) and Infrastructure Executive Council (IEC). All Medical JCSG decisions were made by vote, and dissenting opinions were entered into the meeting minutes and presented to the ISG/IEC. Review and adjudication by the ISG and IEC resulted in the recommendations.

The recommendations approved by the Secretary of Defense follow:

Walter Reed National Military Medical Center, Bethesda, MD

Recommendation: Realign Walter Reed Army Medical Center, Washington, DC, as follows: relocate all tertiary (sub-specialty and complex care) medical services to National Naval Medical Center, Bethesda, MD, establishing it as the Walter Reed National Military Medical Center Bethesda, MD; relocate Legal Medicine to the new Walter Reed National Military Medical Center Bethesda, MD; relocate sufficient personnel to the new Walter Reed National Military Medical Center Bethesda, MD, to establish a Program Management Office that will coordinate pathology results, contract administration, and quality assurance and control of DoD second opinion consults worldwide; relocate all non-tertiary (primary and specialty) patient care functions to a new community hospital at Ft Belvoir, VA; relocate the Office of the Secretary of Defense supporting unit to Fort Belvoir, VA; disestablish all elements of the Armed Forces Institute of Pathology except the National Medical Museum and the Tissue Repository; relocate the Armed Forces Medical Examiner, DNA Registry, and Accident Investigation to Dover Air Force Base, DE; relocate enlisted histology technician training to Fort Sam Houston, TX; relocate the Combat Casualty Care Research sub-function (with the exception of those organizational elements performing neuroprotection research) of the Walter Reed Army Institute of Research (Forest Glen Annex) and the Combat Casualty Care Research sub-function of the Naval Medical Research Center (Forest Glen Annex) to the Army Institute of Surgical Research, Fort Sam Houston, TX; relocate Medical Biological Defense Research of the Walter Reed Army Institute of Research (Forest Glen Annex) and Naval Medical Research Center (Forest Glen Annex) to Fort Detrick, MD, and consolidate it with US Army Medical Research Institute of Infectious Diseases; relocate Medical Chemical Defense Research of the Walter Reed Army Institute of Research (Forest Glen Annex) to Aberdeen Proving Ground, MD, and consolidate it with the US Army Medical Research Institute of Chemical Defense; and close the main post.

Justification: This recommendation will transform legacy medical infrastructure into a premier, modernized joint operational medicine platform. This recommendation reduces excess capacity within the National Capital Region (NCR) Multi-Service Market (MSM: two or more facilities colocated geographically with "shared" beneficiary population) while maintaining the same level of care for the beneficiaries. Walter Reed Army Medical Center (AMC) has a military value of 54.46 in contrast to the higher military values of National Naval Medical Center (NNMC) Bethesda (63.19) and DeWitt Hospital (58). This action relocates medical care into facilities of higher military value and capacity. By making use of the design capacity inherent in NNMC Bethesda (18K RWPs) and an expansion of the inpatient care at DeWitt Hospital (13K RWPs), the entire inpatient care produced at Walter Reed AMC (17K RWPs) can be relocated into these facilities along with their current workload (11K RWPs and 1.9K RWPs, respectively). This strategically relocates healthcare in better proximity to the beneficiary base, which census data indicates is concentrating in the southern area of the region. As a part of this action, approximately 2,069 authorizations (military and civilian) will be realigned to DeWitt Hospital and 797 authorizations will be realigned to NNMC Bethesda in order to maintain the current level of effort in providing care to the NCR beneficiary population. DeWitt Hospital will assume all patient care missions with the exception of the specific tertiary care missions that will go to the newly established Walter Reed National Military Medical

Center at Bethesda. Specialty units, such as the Amputee Center at WRAMC, will be relocated within the National Capitol Region. Casualty care is not impacted. Development of a premier National Military Medical Center will provide enhanced visibility, as well as recruiting and retention advantages to the Military Health System. The remaining civilian authorizations and contractors at Walter Reed AMC that represent unnecessary overhead will be eliminated. Military personnel filling similar "overhead positions" are available to be redistributed by the Service to replace civilian and contract medical personnel elsewhere in Military Healthcare System activities of higher military value.

Co-location of combat casualty care research activities with related military clinical activities of the trauma center currently located at Brooke Army Medical Center, Fort Sam Houston, TX, promotes translational research that fosters rapid application of research findings to health care delivery, and provides synergistic opportunities to bring clinical insight into bench research through sharing of staff across the research and health care delivery functions.

This action will co-locate Army, Navy, Air Force and Defense Agency program management expertise for non-medical chemical and biological defense research, development and acquisition (each at Aberdeen Proving Ground, MD) and two separate aspects of medical chemical and biological research: medical biological defense research (at Ft. Detrick, MD) and medical chemical defense research (at Aberdeen Proving Ground, MD). It will:

- promote beneficial technical interaction in planning and headquarters-level oversight of all defense biomedical R&D, fostering a joint perspective and sharing of expertise and work in areas of joint interest;
- create opportunities for synergies and efficiencies by facilitating integrated program
 planning to build joint economies and eliminate undesired redundancy, and by optimizing
 use of a limited pool of critical professional personnel with expertise in medical product
 development and acquisition;
- foster the development of common practices for DoD regulatory interactions with the U.S. Food and Drug Administration; and
- facilitate coordinated medical systems lifecycle management with the medical logistics organizations of the Military Departments, already co-located at Fort Detrick.

The Armed Forces Institute of Pathology (AFIP) was originally established as the Army Medical Museum in 1862 as a public and professional repository for injuries and disease specimens of Civil War soldiers. In 1888, educational facilities of the Museum were made available to civilian medical professions on a cooperative basis. In 1976, Congress established AFIP as a joint entity of the Military Departments subject to the authority, control, and direction of the Secretary of Defense. As a result of this recommendation, in the future the Department will rely on the civilian market for second opinion pathology consults and initial diagnosis when the local pathology labs capabilities are exceeded.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$988.8M. The net of all costs and savings to the Department during the implementation period is a cost of \$724.2M. Annual recurring savings to the Department after

implementation are \$99.6M with a payback expected in 10 years. The net present value (NPV) of the costs and savings to the Department over 20 years is a savings of \$301.2M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 6,011 (3,567 direct jobs and 2,444 indirect jobs) in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division, which is 0.2 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces and personnel. Civilian inpatient capacity exists in the area to provide services to the eligible population. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has a potential impact on air quality at NNMC Bethesda, MD, Fort Belvoir, VA, Dover AFB, DE, Aberdeen Proving Ground, MD and Fort Detrick, MD. New source review permitting and air conformity analyses may be required. Additional operations at Dover may impact archaeological resources and historic properties. New construction could impact historic resources at Fort Sam Houston, Fort Belvoir, and Aberdeen Resources must be evaluated on a case-by-case basis at Fort Belvoir, Aberdeen Proving Ground, and Fort Detrick. Consultation with SHPO will be required to ensure protection of cultural resources at Walter Reed. Additional operations may impact sensitive resources at Dover and constrain operations. Additional operations at Aberdeen may further impact threatened/endangered species leading to additional restrictions on training or operations. Modification to the hazardous waste program at Dover may be required. Significant mitigation measures to limit releases may be required at Aberdeen to reduce impacts to water quality and achieve US EPA water quality standards. Additional operations may impact wetlands at Dover, which may restrict operations. This recommendation has no impact on dredging; marine mammals, resources, or sanctuaries; noise; or wetlands. This recommendation will require spending approximately \$2.8M for waste management and environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Brooks City Base, TX

Recommendation: Close Brooks City Base, San Antonio, TX. Relocate the Air Force Audit Agency and 341st Recruiting Squadron to Randolph AFB. Relocate the United States Air Force School of Aerospace Medicine, the Air Force Institute of Occupational Health, the Naval Health Research Center Electro-Magnetic Energy Detachment, the Human Systems Development and Acquisition function, and the Human Effectiveness Directorate of the Air Force Research

Laboratory to Wright Patterson Air Force Base, OH. Consolidate the Human Effectiveness Directorate with the Air Force Research Laboratory, Human Effectiveness Directorate at Wright Patterson Air Force Base, OH. Relocate the Air Force Center for Environmental Excellence, the Air Force Medical Support Agency, Air Force Medical Operations Agency, Air Force Element Medical Defense Agency, Air Force Element Medical-DoD, Air Force-Wide Support Element, 710th Information Operations Flight and the 68th Information Operations Squadron to Lackland Air Force Base, TX. Relocate the Army Medical Research Detachment to the Army Institute of Surgical Research, Fort Sam Houston, TX. Relocate the Non-Medical Chemical Biological Defense Development and Acquisition to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD. Disestablish any remaining organizations.

Realign Holloman AFB by disestablishing the high-onset gravitational force centrifuge and relocating the physiological training unit (49 ADOS/SGGT) to Wright-Patterson AFB.

Justification: This recommendation enables technical synergy, and positions the Department of the Air Force to exploit a center-of-mass of scientific, technical, and acquisition expertise required by the 20-year Force Structure Plan. Greater synergy across technical capabilities and functions will be achieved by consolidating geographically separate units of the Air Force Research Laboratory.

The end state will co-locate the Human Systems Development & Acquisition function and the Human Systems Research function with Air Force Aerospace Medicine and Occupational Health education and training. This action will co-locate the Development & Acquisition for Human Systems with the Research function and will concentrate acquisition expertise for Human Systems at one site. Additionally, the relocation of the physiological training unit from Holloman AFB with the relocation of the high-onset gravitational-force centrifuge, enables the continued use of a critical piece of equipment required for both Human Systems Research and Aerospace Medicine Education and Training. This end state will also increase synergy with the Air Platform Research and Development & Acquisition functions and continue the efficient use of equipment and facilities implemented under Biomedical Reliance and BRAC 91 at Wright Patterson AFB, OH.

Co-location of combat casualty care research activities with related military clinical activities of the trauma center currently located at Brooke Army Medical Center, Fort Sam Houston TX, promotes translational research that fosters rapid application of research findings to health care delivery, and provides synergistic opportunities to bring clinical insight into bench research through sharing of staff across the research and health care delivery functions. The availability of a co-located military trauma center also provides incentives for recruitment and retention of military physicians as researchers, and is a model that has proven highly successful in civilian academic research centers.

Edgewood Chemical and Biological Center, Aberdeen Proving Ground, is home to the military's most robust infrastructure supporting research utilizing hazardous chemical agents. Relocation of the Non-medical Chemical Biological Defense Development and Acquisition to Aberdeen Proving Ground will increase synergy, focus on joint needs, and efficient use of equipment and

facilities by co-locating Tri-Service and Defense activities performing functions in chemical-biological defense and medical RDA.

This recommendation also moves the Air Force Center for Environmental Excellence (AFCEE) to Lackland AFB, where it will be co-located the Air Force Real Property Agency (AFRPA) that is being relocated to Lackland in a separate recommendation. The military value of AFCEE is 265th out of 336 entities evaluated by the Major Administrative and Headquarters (MAH) military value model. Lackland Air Force Base is ranked 25th out of 336.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$325.3M. The net of all costs and savings to the Department during the implementation period is a cost of \$45.9M. The annual recurring savings to the Department after implementation is \$102.1M, with a payback expected in 2 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$940.7M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 29 jobs (17 direct jobs and 12 indirect jobs) in the Alamogordo, NM Micropolitan Statistical Area, which is 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 4,081 jobs (2,097 direct jobs and 1,984 indirect jobs) in the San Antonio, TX Metropolitan Statistical Area, which is 0.4 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation is expected to impact air quality at Fort Sam Houston, Wright-Patterson, and Aberdeen Proving Ground. New source review permitting and permit modifications may be required. This recommendation has the potential to impact cultural or historic resources at Fort Sam Houston, Randolph, Lackland, Aberdeen Proving Ground, Brooks, and Wright-Patterson. Additional operations at Fort Sam Houston and Wright-Patterson may further impact threatened and endangered species leading to additional restrictions on training or operations. Significant mitigation measures to limit releases at Fort Sam Houston may be required to reduce impacts to water quality and achieve US EPA water quality standards. Increases in population and operations at Aberdeen Proving Ground may require upgrades/purchase of additional waste management services. Modification of the hazardous waste program at Randolph and Wright-Patterson may be necessary. Additional operations may impact wetlands at Wright-Patterson and Lackland AFB, which may restrict operations. This recommendation has no impact on dredging; marine mammals, resources, or sanctuaries; land use constraints or sensitive resource areas; or noise. This recommendation will require spending

approximately \$0.5M for waste management and environmental compliance activities. This cost was included in the payback calculation. Brooks City Base reports \$4.2M in environmental restoration costs. Because the Department has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, or environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

McChord Air Force Base, WA

Recommendation: Realign McChord Air Force Base, WA, by relocating all medical functions to Fort Lewis, WA.

Justification: The primary rationale for this recommendation is to promote jointness and reduce excess capacity. This recommendation supports strategies of reducing excess capacity and locating military medical personnel in areas with enhanced opportunities for medical practice. McChord AFB's medical facility produced 44,283 Relative Value Units (RVUs) in FY02, which is well below the Military Health System average of 166,692 RVUs. Its Healthcare Services Functional Military Value of 51.45, is much lower than that of Ft Lewis (73.30). Military personnel stationed at McChord AFB's Medical Facility can be placed in activities of higher military value with a more diverse workload, providing them with enhanced opportunities to maintain their medical currency and making them better able to support Army medical readiness requirements. Approximately 169 military and civilian authorizations will be realigned to Fort Lewis in order to maintain the current level of effort in providing care to the McChord AFB beneficiary population. The remaining civilian authorizations and contractors at McChord AFB that represent unnecessary overhead will be eliminated. Military personnel that are filling similar "overhead positions" will be redistributed by the Service to replace civilian and contract medical personnel elsewhere in the Military Health System activities of higher military value. The large savings along with the reduction of inefficiencies and workload available supports this action. While the jobs are lost in the military system the same type of job is available in the community.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$1.1M. The net of all costs and savings to the Department during the implementation period is a savings of \$55.1M. Annual recurring savings to the Department after implementation are \$11.6M with a payback expected immediately. The net present value of the costs and savings to the Department over 20 years is a savings of \$164.4M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 101 jobs (55 direct jobs and 46 indirect jobs) over the 2006-2011 period in the Tacoma, WA Metropolitan Division, which is less than 0.1 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces and personnel. Civilian inpatient capacity exists in the area to provide services to the eligible population. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has no impact on air quality, cultural, archeological, or tribal resources; dredging; and use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation will require spending approximately \$0.1M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

San Antonio Regional Medical Center, TX

Recommendation: Realign Lackland Air Force Base, TX, by relocating the inpatient medical function of the 59th Medical Wing (Wilford Hall Medical Center) to the Brooke Army Medical Center, Ft Sam Houston, TX, establishing it as the San Antonio Regional Military Medical Center, and converting Wilford Hall Medical Center into an ambulatory care center.

Realign Naval Air Station Great Lakes, IL, Sheppard Air Force Base, TX, Naval Medical Center Portsmouth, Naval Medical Center San Diego, CA, by relocating basic and specialty enlisted medical training to Fort Sam Houston, TX.

Justification: The primary rationale for this recommendation is to transform legacy medical infrastructure into a modernized joint operational medicine platform. This recommendation reduces excess capacity within the San Antonio Multi-Service Market (MSM: two or more facilities colocated geographically with "shared" beneficiary population) while maintaining the level of care for the beneficiaries, enhancing opportunities for provider currency, and maintaining surge capacity. By making use of the design capacity inherent in Brooke Army Medical Center (BAMC), the entire inpatient care produced at WHMC can be relocated into this facility. In terms of military value, while BAMC had a slightly lower quantitative military value score than WHMC, the difference was so small as to not be a meaningful discriminator. Additionally, the small difference is primarily attributable to the efficiency of the Dental Clinic at WHMC, a facility that is excluded from this recommendation. It was the military judgment of the MJCSG that in the context of this recommendation, the condition of the facilities and their average weighted age were the most important elements of the military value of the two locations. In this area, BAMC received a significantly higher score than WHMC. Additionally, it is more cost effective and timely to return BAMC to it's inherent design capacity and convert WHMC to an ambulatory care center, than to do the reverse. BAMC is located in a more centralized location, enabling it to better support the broader population area. WHMC and BAMC support Level 1 Trauma Centers, this capability is

maintained in this recommendation by expanding the BAMC Level 1 Trauma Center to the capacity of both trauma centers. It was therefore the military judgment of the MJCSG that regionalization at BAMC provided the highest overall military value to the Department. Development of a premier Regional Military Medical Center will provide enhanced visibility, as well as, recruiting and retention advantages to the Military Health System. The remaining civilian authorizations and contractors at Wilford Hall Medical Center that represent unnecessary overhead will be eliminated. Military personnel filling similar "overhead positions" are available to be redistributed by the Service to replace civilian and contract medical personnel elsewhere in Military Healthcare System activities of higher military value. While the jobs are lost in the military system the same type of job is available in the community.

This recommendation also co-locates all (except Aerospace Medicine) medical basic and specialty enlisted training at Fort Sam Houston, TX, with the potential of transitioning to a joint training effort. This will result in reduced infrastructure and excess system capacity, while capitalizing on the synergy of the co-location similar training conducted by each of the three Services. In addition, the development of a joint training center will result in standardized training for medical enlisted specialties enhancing interoperability and joint deployability. Co-location of medical enlisted training with related military clinical activities of the San Antonio Regional Medical Center at Brooke Army Medical Center, Fort Sam Houston, TX, provides synergistic opportunities to bring clinical insight into the training environment, real-time. As a result, both the healthcare delivery and training experiences are exponentially enhanced.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$1,040.9M. The net of all costs and savings to the Department during the implementation period is a cost of \$826.7M. Annual recurring savings to the Department after implementation are \$129.0M with a payback expected in 10 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$476.2M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 4,373 jobs (1,926 direct jobs and 2,447 indirect jobs) over the 2006-2011 period in the Lake County-Kenosha County, IL-WI Metropolitan Division, which is 0.88 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 3,101 jobs (1,630 direct jobs and 1,471 indirect jobs) over the 2006-2011 period in the San Diego-Carlsbad-San Marcos, CA Metropolitan Statistical Area, which is 0.17 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 3,963 jobs (2,378 direct jobs and 1,585 indirect jobs) over the 2006-2011 period in the Wichita Falls, TX Metropolitan Statistical Area, which is 4.26 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,013 jobs (489 direct jobs and 524 indirect jobs) over the 2006-2011 period in the

Virginia Beach-Norfolk-Newport News, VA Metropolitan Statistical Area, which is 0.1 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. Civilian inpatient capacity exists in the area to provide services to the eligible population. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation is expected to impact air quality at Fort Sam Houston. Title V permit, permit modification, and a New Source Review may be required. This recommendation has the potential to impact cultural or historic resources at Fort Sam Houston and Lackland AFB. Additional operations at Fort Sam Houston may further impact federally listed species leading to additional restrictions on training or operations. A hazardous waste program modification may be required at Lackland AFB. Significant mitigation measures to limit releases may be required at Fort Sam Houston to reduce impacts to water quality and achieve US EPA water quality standards. This recommendation has no impact on dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; or wetlands. This recommendation will require spending approximately \$1.2M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Convert Inpatient Services to Clinics

Recommendation: Realign Marine Corps Air Station Cherry Point, NC by disestablishing the inpatient mission at Naval Hospital Cherry Point; converting the hospital to a clinic with an ambulatory surgery center.

Realign Fort Eustis, VA, by disestablishing the inpatient mission at the Fort Eustis Medical Facility; converting the hospital to a clinic with an ambulatory surgery center.

Realign the United States Air Force Academy, CO, by relocating the inpatient mission of the 10th Medical Group to Fort Carson Medical Facility, CO; converting the 10th Medical Group into a clinic with an ambulatory surgery center.

Realign Andrews Air Force Base, MD, by disestablishing the inpatient mission at the 89th Medical Group; converting the hospital to a clinic with an ambulatory surgery center.

Realign MacDill Air Force Base, FL, by disestablishing the inpatient mission at the 6^{th} Medical Group; converting the hospital to a clinic with an ambulatory surgery center.

Realign Keesler Air Force Base, MS, by disestablishing the inpatient mission at the 81st Medical Group; converting the medical center to a clinic with an ambulatory surgery center.

Realign Scott Air Force Base, IL, by disestablishing the inpatient mission at the 375th Medical Group; converting the hospital to a clinic with an ambulatory surgery center.

Realign Naval Station Great Lakes, IL, by disestablishing the inpatient mission at Naval Hospital Great Lakes; converting the hospital to a clinic with an ambulatory surgery center.

Realign Fort Knox, KY, by disestablishing the inpatient mission at Fort Knox's Medical Facility; converting the hospital to a clinic with an ambulatory surgery center.

Justification: The Department will rely on the civilian medical network for inpatient services at these installations. This recommendation supports strategies of reducing excess capacity and locating military personnel in activities with higher military value with a more diverse workload, providing them with enhanced opportunities to maintain their medical currency to meet COCOM requirements. Additionally, a robust network with available inpatient capacity of Joint Accreditation of Hospital Organizations (JCAHO) and/or Medicare accredited civilian/Veterans Affairs hospitals is located within 40 miles of the referenced facilities.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$12.9M. The net of all costs and savings to the Department during the implementation period is a savings of \$250.9M. Annual recurring savings to the Department after implementation are \$60.2M with payback expected immediately. The net present value of the costs and savings to the Department over 20 years is a savings of \$818.1M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 69 jobs (38 direct jobs and 31 indirect jobs) over the 2006-2011 period in the New Bern, NC Micropolitan Statistical Area, which is 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 78 jobs (34 direct jobs and 44 indirect jobs) over the 2006-2011 period in the Virginia Beach-Norfolk-Newport News, VA-NC Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 11 jobs (6 direct jobs and 5 indirect jobs) over the 2006-2011 period in the Colorado Springs, CO Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 265 jobs (160 direct jobs and 105 indirect jobs) over the 2006-2011 period in the

Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 35 jobs (19 direct jobs and 16 indirect jobs) over the 2006-2011 period in the Tampa-St. Petersburg-Clearwater, FL Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 352 jobs (212 direct jobs and 140 indirect jobs) over the 2006-2011 period in the Gulfport-Biloxi, MS Metropolitan Statistical Area, which is 0.2 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 143 jobs (77 direct jobs and 66 indirect jobs) over the 2006-2011 period in the St. Louis, MO-IL Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 122 jobs (45 direct jobs and 77 indirect jobs) over the 2006-2011 period in the Lake County-Kenosha County, IL-WI Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 147 jobs (85 direct jobs and 62 indirect jobs) over the 2006-2011 period in the Elizabethtown, KY Metropolitan Statistical Area, which is 0.2 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces and personnel. Civilian inpatient capacity exists in the area to provide services to the eligible population. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation could have a minimal impact on water resources at Fort Carson where increased installation population may require upgrade of water infrastructure. This recommendation has no impact on air quality, cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; waste management; or wetlands. This recommendation will require spending approximately \$0.1M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this

recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Joint Centers of Excellence for Chemical, Biological, and Medical Research and Development and Acquisition

Recommendation: Realign Building 42, 8901 Wisconsin Ave, Bethesda, MD, by relocating the Combat Casualty Care Research sub-function of the Naval Medical Research Center to the Army Institute of Surgical Research, Fort Sam Houston, TX.

Realign Naval Station Great Lakes, IL, by relocating the Army Dental Research Detachment, the Air Force Dental Investigative Service, and the Naval Institute for Dental and Biomedical Research to the Army Institute of Surgical Research, Fort Sam Houston, TX.

Realign 13 Taft Court and 1600 E. Gude Drive, Rockville, MD, by relocating the Walter Reed Army Institute of Research, Division of Retrovirology to the Walter Reed Army Institute of Research, Walter Reed Army Medical Center – Forest Glen Annex, MD, establishing it as a Center of Excellence for Infectious Disease.

Realign Naval Air Station Pensacola, FL, by relocating the Naval Aeromedical Research Laboratory to Wright-Patterson AFB, OH.

Realign 12300 Washington Ave, Rockville, MD, by relocating the Medical Biological Defense Research sub-function to the U. S. Army Medical Research Institute of Infectious Diseases, Ft. Detrick, MD.

Realign Potomac Annex-Washington, DC, by relocating Naval Bureau of Medicine, Code M2, headquarters-level planning, investment portfolio management and program and regulatory oversight of DoD Biomedical Science and Technology programs and FDA-regulated medical product development within the biomedical RDA function to a new Joint Biomedical Research, Development and Acquisition Management Center at Fort Detrick, MD.

Realign 64 Thomas Jefferson Drive, Frederick, MD, by relocating the Joint Program Executive Office for Chemical Biological Defense, Joint Project Manager for Chemical Biological Medical Systems headquarters-level planning, investment portfolio management and program and regulatory oversight of DoD Biomedical Science and Technology programs and FDA-regulated medical product development within the RDA function to a new Joint Biomedical Research, Development and Acquisition Management Center at Fort Detrick, MD.

Realign Fort Belvoir, VA, by relocating the Chemical Biological Defense Research component of the Defense Threat Reduction Agency to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD.

Realign Tyndall AFB, FL, by relocating Non-medical Chemical Biological Defense Research to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD, and consolidating it with Air Force Research Laboratory.

Realign Naval Surface Warfare Center, Dahlgren Division, VA, by relocating Non-medical Chemical Biological Defense Research and Development & Acquisition to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD.

Realign Naval Surface Warfare Center, Crane Division, IN, by relocating the Non-medical Chemical Biological Defense Development and Acquisition to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD.

Realign Skyline 2 and 6, Falls Church, VA, by relocating the Joint Program Executive Office for Chemical Biological Defense to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD.

Justification: This recommendation creates Joint Centers of Excellence for Battlefield Health and Trauma research at Fort Sam Houston, TX; Infectious Disease research at Walter Reed – Forest Glenn Annex, MD; Aerospace Medicine research at Wright Patterson AFB, OH; Regulated Medical Project development & acquisition at Fort Detrick, MD; Medical Biological Defense research at Fort Detrick, MD; and Chemical Biological Defense research, development & acquisition at Aberdeen Proving Ground, MD. These actions will increase synergy, focus on joint needs, and efficient use of equipment and facilities by co-locating Tri-Service and Defense activities performing functions in chemical-biological defense and medical RDA. Fort Sam Houston is the best location for the Center for Battlefield Health and Trauma because it is the only current biomedical S&T location that also includes a military trauma center, providing enhanced translational research opportunities and ability to recruit and retain physicianscientists. Walter Reed Army Medical Center, Forest Glen Annex, is the CONUS hub of the worldwide Army and Navy activities in infectious diseases of military significance. Fort Detrick, MD, is the site of an Interagency Biodefense Campus and the military's only Bio-Safety Level 4 containment facilities for medical research. The realignment of Air Force Aerospace medical and non-medical R&D to Wright Patterson AFB, OH, with co-location of associated education and training activities relocated in another recommendation, makes this location most suitable for a joint center for Aerospace Medical Research. Fort Detrick, MD is home of Tri-Service medical logistics as well the Department's largest Medical RDA management activity. Edgewood Chemical and Biological Center, Aberdeen Proving Ground, is home to the military's most robust infrastructure supporting research utilizing hazardous chemical agents. These actions will also reduce the use of leased space within the National Capital Region, and increase the force protection posture of the realigning activities. Specific benefits occurring as a result of this recommendation include:

• Promote beneficial technical and management interaction in the functional research areas of combat casualty care including combat dentistry and maxillofacial care, infectious disease, aerospace medicine, medical and non-medical chemical and biological defense research, as well as in the functional area of medical development and acquisition, fostering a joint perspective and sharing of expertise and work in areas of joint interest.

- Build joint economies and optimize use of limited pools of critical professional personnel with expertise in unique mission areas.
- Co-location of combat casualty care research activities with related military clinical activities of the trauma center currently located at Brooke Army Medical Center, Fort Sam Houston, TX, promotes translational research that fosters rapid application of research findings to health care delivery, and provides synergistic opportunities to bring clinical insight into bench research through sharing of staff across the research and health care delivery functions. The availability of a co-located military trauma center also provides incentives for recruitment and retention of military physicians as researchers, and is a model that has proven highly successful in civilian academic research centers.
- Reduce the number of DoD animal facilities.
- Provide increased opportunities to share management and scientific support functions across Services and reduce costs.
- Foster the development of common practices for DoD regulatory interactions with the U.S. Food and Drug Administration.
- Facilitate coordinated medical systems lifecycle management with the medical logistics organizations of the Military Departments, already co-located at Fort Detrick.
- Promote jointness, enable technical synergy, and position the Department of Defense to exploit a center-of-mass of scientific, technical, and acquisition expertise with the personnel necessary to provide defense against current and emerging chemical and biological warfare threats.
- Complete earlier consolidations of military Service Chemical Biological Defense programs into a joint, consolidated Chemical Biological Defense program.
- Directly support the Department's Strategy for Homeland Defense and Civil Support.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$73.9M. The net of all costs and savings to the Department during the implementation period is a cost of \$45.9M. Annual recurring savings to the Department after implantation are \$9.2M with a payback expected in 7 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$46.0M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 269 jobs (151 direct jobs and 118 indirect jobs) over the 2006-2011 period in the Bethesda-Frederick-Gaithersburg, MD Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 99 jobs (68 direct and 31 indirect jobs) over the 2006-2011 period in the Martin County, IN economic area, which is 1.2 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 250 jobs (99 direct and 151 indirect jobs) over the 2006-2011 period in the Lake County-Kenosha County IL-WI Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 69 jobs (34 direct jobs and 35 indirect jobs) over the 2006-2011 period in the Panama City-Lynn Haven, FL Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 95 jobs (40 direct jobs and 55 indirect jobs) over the 2006-2011 period in the Pensacola-Ferry Pass-Brent, FL Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 38 jobs (19 direct jobs and 19 indirect jobs) over the 2006-2011 period in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 321 jobs (148 direct jobs and 173 indirect jobs) over the 2006-2011 period in the King George County, VA economic area, which is 2.3 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation may impact air quality at Fort Detrick, Fort Sam Houston, Aberdeen Proving Ground, Wright-Patterson AFB, NAS Great Lakes, and BUMED (Potomac Annex). This recommendation may impact cultural, archeological, or tribal resources at Fort Detrick, Fort Sam Houston, Aberdeen Proving Ground, and Wright-Patterson. Additional operations may further impact threatened and endangered species at Wright-Patterson and Aberdeen leading to additional restrictions on training or operations. Significant mitigation measures to limit releases at both Fort Sam Houston and Aberdeen Proving Ground may be required to reduce impacts to water quality and achieve US EPA water quality standards. Additional operations at Wright-Patterson, may impact wetlands, which could restrict operations.

This recommendation has no impact on dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; or waste management. This recommendation will require spending \$7.0M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.