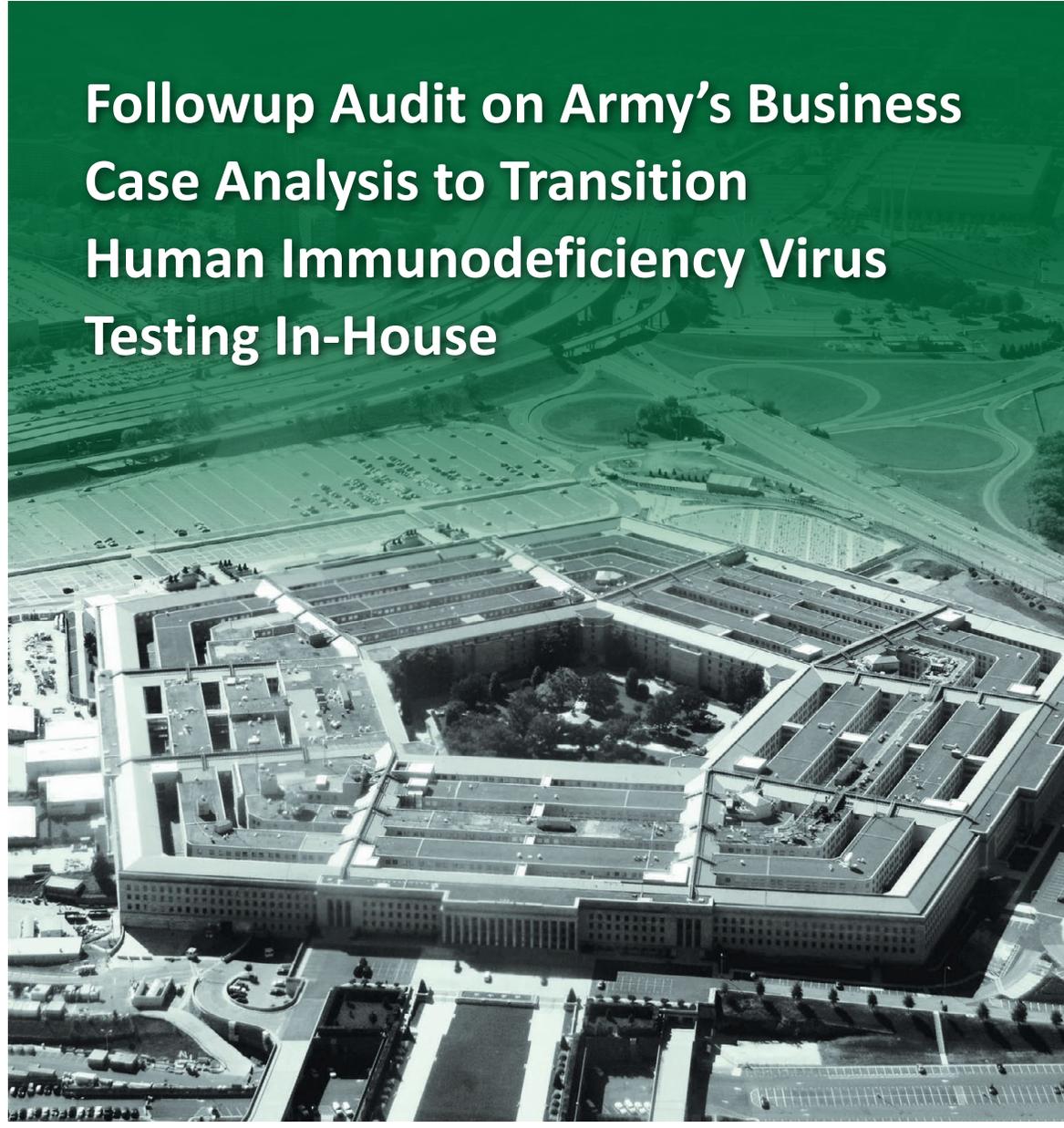


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# INSPECTOR GENERAL

*U.S. Department of Defense*

JANUARY 29, 2019



## Followup Audit on Army's Business Case Analysis to Transition Human Immunodeficiency Virus Testing In-House

INTEGRITY ★ INDEPENDENCE ★ EXCELLENCE

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# Results in Brief

## *Followup Audit on Army's Business Case Analysis to Transition Human Immunodeficiency Virus Testing In-House*

January 29, 2019

### Objective

We determined whether the U.S. Army Medical Command (MEDCOM) corrected problems identified in DoD Office of Inspector General report, Report No. DODIG-2017-066, "Army Did Not Support Business Case Analysis Recommending Transition of Human Immunodeficiency Virus Testing," March 14, 2017.

### Background

Report No. DODIG-2017-066 determined that Walter Reed Army Institute of Research (WRAIR) personnel did not adequately support or document their business case analysis (BCA) for bringing Human Immunodeficiency Virus (HIV) testing in-house. We made two recommendations in that report—that MEDCOM personnel:

- re-perform the BCA for HIV testing to address the six problems related to the development and support of the February 2016 BCA; and
- do not enter into any leases to move the Army laboratories until the BCA was re-performed.

The intent of the recommendations was to ensure that MEDCOM made the best decision on where to perform future HIV testing.

The MEDCOM Chief of Staff agreed with the recommendations and stated that the estimated completion date for the revised BCA was June 30, 2017. MEDCOM and

### Background (cont'd)

WRAIR personnel prepared a March 2018 BCA and subsequently revised the BCA in August and September 2018. We assessed the September 2018 BCA during this audit.

### Finding

In this followup audit, we determined that MEDCOM personnel corrected the problems identified in Report No. DODIG-2017-066. Specifically, WRAIR personnel re-performed the BCA and ensured that the analysis:

- included only HIV testing and how it affected the Army readiness mission in the BCA problem statement and scope;
- included three or more courses of actions and alternatives versus only including the status quo and MEDCOM's preferred course of action;
- consistently used total costs associated with the project;
- used well-defined and measurable alternative selection criteria; and
- was adequately documented and supported.

MEDCOM personnel also did not enter into any leases while WRAIR personnel re-performed the BCA. Additionally, WRAIR personnel updated leasing costs and assumptions made in the September 2018 BCA. As a result of the above actions, the September 2018 BCA supported MEDCOM's decision to transfer HIV testing from the current contractor to the Army's HIV Diagnostics and Reference Laboratory. Therefore, we closed the two prior recommendations.

However, in this followup audit, we determined that although WRAIR personnel updated leasing costs and assumptions in the September 2018 BCA, they did not include the most updated information used to rank the course of action to transfer HIV testing from the current contractor to the Air Force Epidemiology Laboratory. Specifically, WRAIR



# Results in Brief

## *Followup Audit on Army's Business Case Analysis to Transition Human Immunodeficiency Virus Testing In-House*

### **Finding (cont'd)**

personnel did not consider the changes the Air Force made to its HIV testing platform and automation. If WRAIR personnel had considered this information, the Army's HIV Diagnostics and Reference Laboratory still would outscore the Air Force Epidemiology Laboratory. However, the Air Force Laboratory would score higher than continuing testing at the contractor.

As a result, MEDCOM may overpay for HIV testing if it continues with the current contractor after the contract ends. We concluded that the Army could save at least \$4.4 million each year if the Army transitions HIV testing to the Air Force Epidemiology Laboratory until the Army moves its HIV Diagnostics and Reference Laboratory into leased space and can accept the full Army HIV testing mission.

### **Recommendations**

We recommend that the MEDCOM Chief of Staff compare HIV testing services provided by the Air Force Epidemiology Laboratory to services performed under contract W81K04-19-D0003 and determine whether the Army should transition testing to the Air Force Epidemiology Laboratory when contract W81K04-15-D0006's period of performance ends on February 27, 2019, until the Army HIV Diagnostics and Reference Laboratory is moved into leased space and can accept the full Army HIV testing mission.

### **Management Comments and Our Response**

The MEDCOM Interim Chief of Staff agreed to compare the Air Force's HIV testing services against contract W81K04-19-D0003 to determine whether the Army should transition testing to the Air Force until the Army moves its HIV laboratory into leased space and can accept the full Army HIV testing mission. The MEDCOM Interim Chief of Staff stated that this analysis would be completed by February 15, 2019. In addition, the Interim Chief of Staff stated that MEDCOM could not validate the potential monetary benefits presented in the report because the report did not include information demonstrating that the Air Force cost per test fully accounted for all costs. He further stated that the MEDCOM comparison will analyze whether costs savings can be achieved by using the Air Force Epidemiology Laboratory during the transition. The Interim Chief of Staff addressed the recommendation and we acknowledge that MEDCOM personnel cannot validate the \$4.4 million in potential savings until MEDCOM completes its comparison of the services performed under the contract and the services provided by the Air Force. Therefore, the recommendation is resolved but will remain open. We will close the recommendation once we receive and review MEDCOM's comparison of the Air Force's HIV testing services against contract W81K04-19-D0003.

## **Recommendations Table**

<b>Management</b>	<b>Recommendations Unresolved</b>	<b>Recommendations Resolved</b>	<b>Recommendations Closed</b>
Chief of Staff, U.S. Army Medical Command	None	1	DODIG-2017-066: 1.a.1, 1.a.2, 1.a.3, 1.a.4, 1.a.5, 1.a.6, 1.b

**Note:** The following categories are used to describe agency management’s comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – OIG verified that the agreed upon corrective actions were implemented.





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

January 29, 2019

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY

**SUBJECT:** Followup Audit on Army's Business Case Analysis to Transition  
Human Immunodeficiency Virus Testing In-House  
(Report No. DODIG-2019-050)

We are providing this report for your review. We conducted this audit in accordance with generally accepted government auditing standards.

We considered U.S. Army Medical Command comments on the draft of this report when preparing the final report. Comments from the U.S. Army Medical Command Interim Chief of Staff addressed all specifics of the recommendation and conformed to the requirements of DoD Instruction 7650.03; therefore, we do not require additional comments.

We appreciate the cooperation and assistance received during the audit. Please direct questions to me (703) 604-9312 (DSN 664-9312).

A handwritten signature in black ink, appearing to read "Theresa S. Hull".

Theresa S. Hull  
Assistant Inspector General  
Acquisition, Contracting, and Sustainment

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# Introduction

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## Objective

We determined whether the U.S. Army Medical Command (MEDCOM) corrected problems identified in DoD Office of Inspector General report, Report No. DODIG-2017-066, “Army Did Not Support Business Case Analysis Recommending Transition of Human Immunodeficiency Virus Testing,” March 14, 2017. See the Appendix for a discussion of the scope and methodology and prior coverage related to the objective.

## Background

DoD Instruction 6485.01 requires that all inductees into the Military Services be screened for Human Immunodeficiency Virus (HIV).<sup>1</sup> Additionally, the Instruction requires that all service members be routinely screened every 2 years unless clinical symptoms indicate that testing should be more frequent. According to Army Regulation AR 600-110, active duty soldiers are considered deployable if they have a negative HIV test.<sup>2</sup>

Furthermore, DoD Instruction 1332.45 requires service members who are not deployable for more than 12 consecutive months be evaluated for retention determination, referred into the Disability Evaluation System, or administratively separated.<sup>3</sup> Walter Reed Army Institute of Research (WRAIR) personnel stated that with military careers on the line, it is more important now than ever to ensure soldiers get an accurate HIV diagnosis in the shortest amount of time.

## ***HIV Research and Testing Program***

MEDCOM oversees the U.S. Army Medical Research and Materiel Command, which is responsible for medical research, development, and acquisition and medical logistics management. WRAIR, under the U.S. Army Medical Research and Materiel Command, conducts biomedical research according to DoD and Army requirements.

According to an Army Report to Congress, the Department of Laboratory Diagnostics and Monitoring within WRAIR was one of two departments authorized by Congress in 1986 to support the development, evaluation, and

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<sup>1</sup> DoD Instruction 6485.01, “Human Immunodeficiency Virus (HIV) In Military Service Members,” June 7, 2013.

<sup>2</sup> Army Regulation AR 600-110, “Identification, Surveillance, and Administration of Personnel Infected with Human Immunodeficiency Virus,” April 22, 2014.

<sup>3</sup> DoD Instruction 1332.45, “Retention Determinations for Non-Deployable Service Members,” July 30, 2018.

implementation of HIV diagnostic and monitoring technologies for the warfighter.<sup>4</sup> The Army's HIV Diagnostics and Reference Laboratory (HDRL), at the WRAIR in Silver Spring, Maryland, was established within the Department of Laboratory Diagnostics and Monitoring. The HDRL has served the DoD and Army since 1987. The Army performs HIV research and HIV testing at the HDRL.

The Army administers its HIV testing program using a combination of in-house and contracted services. According to WRAIR personnel, the Army performs approximately 1 million HIV tests per year. A contracted laboratory in San Antonio, Texas, conducts the initial HIV screening tests of service members located in the continental United States. The HDRL conducts the initial HIV screening tests for U.S. Military Entrance Processing Command recruits and for service members located outside of the continental United States. The HDRL conducts all Army confirmatory HIV testing.<sup>5</sup>

According to the Army Report to Congress, MEDCOM personnel considered conducting all HIV testing at the HDRL after September 2011 and would no longer use a contractor to perform the initial HIV screening test. According to MEDCOM personnel, partitioning HIV testing negatively affects force readiness and deployability because commercial outsourcing limits the transparency of the testing process; places constraints on being able to modify the HIV test algorithms or incorporate the newest, most advanced technologies for HIV detection; and takes additional time to transfer repeat reactive specimens and results between the contractor and the HDRL. However, the Army did not have the capacity to expand the laboratory space at the HDRL and planned to use leased space. Therefore, WRAIR personnel prepared the May 2014 Business Case Analysis (BCA) and updated it in February 2016 to support transferring HIV testing from the current contractor to testing in-house at the HDRL. We reviewed the updated February 2016 BCA during the prior audit.

### ***Business Case Analysis***

According to the Army Cost Benefit Analysis Guide (CBA Guide), a BCA is a decision support tool that documents predicted effects of courses of action under consideration to solve a problem.<sup>6</sup> According to the CBA Guide, the BCA must be performed to support leadership decisions. The DoD Product Support Business Case Analysis Guidebook, (BCA Guidebook) states that the BCA is a structured methodology and document that aids decision-making by identifying and

<sup>4</sup> Department of the Army Report to Congress, "Human Immunodeficiency Virus (HIV) Testing," 2016.

<sup>5</sup> If the initial HIV screening test is nonreactive, the patient is determined as HIV negative. If the initial screening test is reactive (showing a response), the screening test is repeated two more times. If two of the three screening tests are reactive, a confirmatory test is performed to finalize a positive or negative result.

<sup>6</sup> U.S. Army Cost Benefit Analysis Guide, 3rd Edition, April 24, 2013.

comparing alternatives and considers all benefits, including nonfinancial benefits.<sup>7</sup> According to the CBA Guide, it is important that the BCA preparer keep the document updated so that the decision maker can make a decision using the best available information.

## Summary of Prior Audit

On March 2, 2016, the House Committee on Appropriations requested that the DoD Office of Inspector General review the BCA that the Army approved in May 2014 and updated in February 2016, to support the decision to perform HIV testing in-house. In addition, House Report 114-577, to accompany House Report 5293, “Department of Defense Appropriations Bill, 2017,” expressed concern with the decisions by the Departments of the Army and Navy to transition HIV testing from a contracted service to an in-house capability. This House Report directed the DoD Office of Inspector General to examine the BCAs undertaken by the Army and Navy, and provide a report on its findings to the congressional defense committees.

On March 14, 2017, the DoD Office of Inspector General issued Report No. DODIG-2017-066, stating that WRAIR personnel did not adequately support or document their February 2016 BCA for bringing HIV testing in-house. This occurred because WRAIR personnel did not follow DoD or Army guidance for preparing a BCA. Specifically they:

- developed the BCA around co-locating and moving the entire HDRL and other non-HIV testing elements to a leased facility. For example, WRAIR personnel included non-HIV testing elements in their analysis, which were not related to the problem statement;
- based the premise of the BCA on a research cooperative agreement that could not be used;
- did not consider three or more courses of action as required by Army guidance;
- did not consistently use total costs in their analysis; and
- used flawed selection criteria in the decision matrix analysis.

As a result, MEDCOM personnel could not ensure that they made the best decision transferring HIV testing from the contractor to the HDRL, and may increase costs by moving the HDRL and the other non-HIV mission elements into leased space.

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<sup>7</sup> DoD Product Support Business Case Analysis Guidebook, 2011.

## ***Recommendations and Agreed-Upon Actions***

In the prior report, we made two recommendations that were resolved, but remained open.<sup>8</sup> The recommendations were to re-perform the BCA for HIV testing to address the six problems related to the development and support of the February 2016 BCA, and not enter into any leases to move the Army laboratories until the BCA was re-performed. The intent of the recommendations was to ensure MEDCOM had a well-supported and documented BCA before making a decision on where to perform future HIV testing. The MEDCOM Chief of Staff agreed with the recommendations and stated that the estimated completion date for the revised BCA was June 30, 2017. MEDCOM and WRAIR personnel prepared a March 2018 BCA and subsequently revised the BCA in August and September 2018. We assessed the September 2018 BCA during this audit.

## **Review of Internal Controls**

DoD Instruction 5010.40 requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls.<sup>9</sup> We identified an internal control weakness in the Army's development of the BCA. Specifically, WRAIR personnel did not consider the changes the Air Force made to its HIV testing platform and automation. We will provide a copy of the report to the senior official responsible for internal controls within MEDCOM.

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<sup>8</sup> If a recommendation is resolved, it means management agreed to implement the recommendation; however, recommendations remain open until the DoD Office of Inspector General can verify that corrective actions were implemented.

<sup>9</sup> DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013.

## Finding

### Corrective Actions Improved Army BCA, but Additional Savings Could Be Achieved

MEDCOM corrected the problems identified in Report No. DODIG-2017-066, “Army Did Not Support Business Case Analysis Recommending Transition of Human Immunodeficiency Virus Testing,” March 14, 2017. Specifically, WRAIR personnel re-performed the BCA and ensured that the analysis:

- included only HIV testing and how it affected the Army readiness mission in the BCA problem statement and scope;
- included three or more courses of actions and alternatives versus only including the status quo and MEDCOM’s preferred course of action;
- consistently used total costs associated with the project;
- used well-defined and measurable alternative selection criteria; and
- was adequately documented and supported.

In addition, MEDCOM did not enter into any leases while WRAIR personnel re-performed the BCA. Finally, WRAIR personnel updated leasing costs and assumptions made in the September 2018 BCA with the most recent information. As a result of the above actions, the September 2018 BCA supported MEDCOM’s decision to transfer HIV testing from the current contractor to the HDRL. Therefore, the two prior recommendations are closed.

Although WRAIR personnel updated leasing costs and assumptions in the September 2018 BCA, they did not include the most updated information used to rank the course of action to transfer HIV testing from the current contractor to the Air Force Epidemiology Laboratory. Specifically, WRAIR personnel did not consider the changes the Air Force made to its HIV testing platform and automation. If WRAIR personnel had considered this information, the HDRL still would outscore the Air Force Epidemiology Laboratory. However, the Air Force Laboratory would score higher than continuing testing at the contractor.

As a result, MEDCOM may overpay for HIV testing if it continues using the current contractor after the period of performance ends on February 27, 2019. The Army could save at least \$4.4 million each year if the Army considers transitioning HIV testing to the Air Force Epidemiology Laboratory until the Army moves its HIV Diagnostics and Reference Laboratory into leased space and can accept the full Army HIV testing mission.

## BCA Scope and Problem Statement Were Consistent

In response to the 2017 audit, WRAIR personnel removed non-HIV testing elements from the BCA scope and kept their analysis focused only on HIV testing and how it affected the Army readiness mission. WRAIR personnel followed the CBA Guide, which states that defining the scope of the analysis is critical because it keeps the BCA focused, and a well-scoped BCA should reinforce the problem statement.

In the 2016 BCA, WRAIR personnel developed the BCA around co-locating and moving the entire HDRL and other non-HIV testing elements to a leased facility although the non-HIV testing elements were not related to the problem statement. Therefore, in the prior audit report, we recommended that MEDCOM re-perform the BCA and ensure the analysis include only the scope cited in the problem statement. The September 2018 BCA problem statement stated that to ensure soldier readiness, deployability, and force health protection, the Army requires the highest quality, most cost-effective HIV test that leverages strict engineering controls; requires the most sensitive test available; ensures real-time access

*The scope of the September 2018 BCA included readiness, quality, and cost data for HIV force testing for the DoD from 2012 through 2017, which reinforced the problem statement.*

to and analysis of test data; and ensures rapid turnaround time to an accurate HIV diagnosis.

The scope of the September 2018 BCA included readiness, quality, and cost data for HIV force testing

for the DoD from 2012 through 2017, which reinforced the problem statement. Because WRAIR personnel focused both the scope and problem statement on HIV testing, we closed this recommendation.

## BCA Considered Three or More Courses of Action as Required

WRAIR personnel considered five courses of action in their September 2018 BCA versus only including the status quo and MEDCOM's preferred course of action in the 2016 BCA. Furthermore, after evaluating the five courses of action, WRAIR personnel stated in the September 2018 BCA that two of the courses of action were not feasible and properly documented reasons. WRAIR personnel followed the CBA Guide and documented their reasons for eliminating potential alternatives. The five courses of action that WRAIR personnel considered are listed below.

1. Use a contractor and the HDRL for testing, or the status quo.
2. In-source all Army HIV testing to the HDRL, WRAIR's recommended course of action.

3. Transition the currently-contracted HIV tests to the Air Force Epidemiology Laboratory.
4. Transition outside the continental United States testing currently performed by the HDRL to a contractor.
5. Transition U.S. Military Entrance Processing Command recruits testing currently performed by the HDRL to a contractor.

Additionally, according to the BCA, the HDRL used the assumption that HDRL would retain the HIV confirmatory testing for all Military Departments in all five courses of action. However, WRAIR personnel stated in the September 2018 BCA that courses of action 4 and 5 were not feasible because only one contractor was capable of performing the volume of HIV screening tests necessary, and the courses of action would include out-sourcing HIV tests that the Government currently performs in-house. According to WRAIR personnel, transitioning the in-house testing to a contractor would degrade force readiness because of higher false positive and specimen rejection rates, affecting the deployability of existing service members and processing of new accession candidates. In addition, WRAIR personnel stated that it would significantly degrade current clinical diagnostic research because of the decreased annual test volumes and loss of daily, fresh source specimens.

In their September 2018 BCA, WRAIR personnel considered the total cost, as well as advantages, disadvantages, and risks for each of the five courses of action. For example, for course of action 1, WRAIR personnel stated that there was an established contract method and well-defined costs, which was an advantage of the status quo, but they described a disadvantage in which there was no direct access to the test process or raw test data. Additionally, WRAIR personnel listed course of action 1 as a risk because the contract performance of the new contractor would be unknown. Furthermore, WRAIR personnel stated in the September 2018 BCA that the current contract's period of performance expires in February 2019. On October 2, 2018, MEDCOM personnel awarded contract W81K04-19-D0003, with a period of performance beginning on February 28, 2019, to the existing contractor.

*In their September 2018 BCA, WRAIR personnel considered the total cost, as well as advantages, disadvantages, and risks for each of the five courses of action.*

In addition, WRAIR personnel maintained e-mail documentation to support discussions about which courses of action to include in the BCA. WRAIR personnel followed the BCA Guidebook, which states that the BCA team should document the

process used to determine which alternatives they would analyze and consider in the BCA. Because WRAIR personnel considered five courses of action and they adequately documented and supported the alternatives, we closed this recommendation.

## **BCA Properly Used Total Costs Instead of Incremental Costs**

WRAIR personnel consistently used total costs in the September 2018 BCA for personnel, equipment, supply costs, and other elements. WRAIR personnel followed the CBA Guide, which states that the cost estimates should capture the total cost of each alternative over its entire life cycle, and the estimate should be a summation of all relevant cost elements. In addition, it states that when developing a cost estimate, it is important to capture all of the costs related to the initiative for which the BCA is being developed to ensure the cost estimate is well documented, comprehensive, accurate, and credible.

In the prior audit report, we recommended that MEDCOM re-perform the BCA and ensure the analysis consistently used total costs associated with the project and ensure the costs are adequately documented and supported. We made this recommendation because in the 2016 BCA, WRAIR personnel calculated the cost per test using only the additional operating costs, or incremental costs, for elements such as labor and equipment costs. For example, in the 2016 BCA, WRAIR personnel stated that they already leased four decappers for HIV testing but needed an additional six decappers, for a total of ten, to handle the HIV testing mission if they brought it in-house.<sup>10</sup> However, WRAIR personnel included the equipment costs for only the six new decappers necessary for the additional tests, instead of the total equipment costs for all ten decappers. However, in the September 2018 BCA, WRAIR personnel included the total equipment costs for all decappers necessary to bring the Army HIV testing in-house. Overall, in the September 2018 BCA, WRAIR personnel included salaries and costs for the existing personnel and equipment, as well as the additional salaries and costs for personnel and equipment that would be necessary to bring HIV testing in-house. Because WRAIR personnel consistently used total costs in their September 2018 BCA, we closed this recommendation.

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<sup>10</sup> A decapper is laboratory equipment that manages sample tubes and automates the inspection, identification, decapping, validation, and recapping of test tube samples.

## BCA Used Reasonable Alternative Selection Criteria

WRAIR personnel used reasonable alternative selection criteria when evaluating the courses of action in their September 2018 decision matrixes. Specifically, WRAIR personnel divided their selection criteria into quality and readiness factors and applied weights based on how critical they felt the elements were to the Army's decision. WRAIR personnel changed the criteria based on the prior audit report, which recommended that MEDCOM re-perform the BCA and ensure the analysis used well-defined and measureable alternative selection criteria, and ensure it was adequately documented and supported. See the following Table for the September 2018 BCA selection criteria and weights applied.

*Table. September 2018 BCA Selection Criteria and Weights*

Selection Criteria	Weight
<b>A. Quality Factors</b>	<b>40%</b>
Stringent Engineering Controls	20%
Sensitivity/Specificity	10%
Real-Time Access to Test Data	10%
<b>B. Readiness Factors</b>	<b>60%</b>
Turnaround Time to Definitive Diagnosis	40%
Testing Delays	20%
<b>Total</b>	<b>100%</b>

Source: DoD HIV Force Testing Business Case Analysis, September 25, 2018.

As shown in the Table, WRAIR personnel rated readiness factors higher than quality factors, with a weight of 60 percent. According to WRAIR personnel, readiness factors are the most important to the Army because they most heavily influence readiness, deployability, and the operational mission. In addition to scoring each courses of action selection criteria, WRAIR personnel also determined the total cost to calculate a cost-benefit index. According to WRAIR personnel, the total cost to the Army for force testing was a critical criterion because the data were required for decision makers to balance whether the costs were worth the benefits associated with the change.

WRAIR personnel followed the CBA Guide, which states that a decision matrix is a tool for comparing and prioritizing a list of alternatives, including quantitative and non-quantitative costs and benefits. They also followed the BCA Guidebook, which states that the BCA team will establish evaluation criteria and that the BCA

problem statement, requirements, and desired outcomes should drive the evaluation criteria. Because WRAIR personnel selected well-defined and measurable alternative selection criteria, and they adequately documented and supported their ratings, we closed this recommendation.

### **BCA Was Adequately Documented and Supported**

In the September 2018 BCA, WRAIR personnel adequately documented and supported their scope and problem statement, courses of action, total costs, and alternative selection criteria. Because WRAIR personnel provided adequate documentation and support, we closed this recommendation.

### **MEDCOM Did Not Enter Into Any Leases While Re-Performing the BCA**

MEDCOM did not enter into any leases to move the Army HDRL while re-performing the September 2018 BCA. In the prior audit report, we recommended that MEDCOM not enter into any leases while it re-performed the BCA because WRAIR personnel did not adequately support or document their decision to bring HIV testing in-house.

The prior stationing and lease packages have expired, and according to MEDCOM personnel, it will take a minimum of 17 months once MEDCOM personnel initiate the stationing package process before MEDCOM can get approved packages and identify a new-leased space. Furthermore, once MEDCOM personnel identify an acceptable leased space, construction will be necessary to get the building to the specifications required for HIV testing, which will take another 3 months minimum. Because WRAIR personnel did not enter into any leases to move the HDRL while re-performing the BCA, we closed this recommendation.

### **BCA Updated Leasing Costs and Assumptions, but Did Not Update all Costs and Information**

In the September 2018 BCA, WRAIR personnel removed the non-HIV testing elements from their space requirements document and included only those elements necessary for HIV screening. Furthermore, WRAIR personnel updated the per square foot cost estimate to relocate the HDRL, and excluded the cooperative

agreement that was not available to them. WRAIR followed the CBA Guide, which states that it is important to keep the BCA updated to inform decision makers when making decisions, and that cost estimates should be accurate and updated to reflect changes in technical or program assumptions.

In the 2016 BCA, WRAIR personnel based the relocation of the entire HDRL on a research cooperative agreement that 2 years earlier WRAIR personnel were advised they could not use, resulting in grossly understated lease costs. Specifically, WRAIR personnel estimated \$20 per square foot although other General Services Administration leases in the area ranged from \$35 to \$45 per square foot. Therefore, in the prior audit report, we recommended that MEDCOM re-perform the BCA and ensure the analysis used accurate assumptions and current information and costs. In the September 2018 BCA, WRAIR personnel refocused the BCA scope, removed the non-HIV testing elements from their space requirements, and used a \$52 per square foot cost, which WRAIR personnel based on market rates current at the time they were requested. Because WRAIR personnel based the leasing costs on current, updated costs and did not rely on a research cooperative agreement that was not available to them, we closed this recommendation.

Although WRAIR personnel used current, updated leasing costs and assumptions in the September 2018 BCA, they did not use the most updated information for course of action 3, which was transitioning HIV testing from the current contractor to the Air Force Epidemiology Laboratory. Specifically, WRAIR personnel did not consider the changes the Air Force made to its HIV testing platform and automation. On February 9, 2017, the Air Force issued a modeling study to optimize laboratory testing and in January 2018, according to Air Force personnel, they upgraded to an automation line in their Epidemiology Laboratory for other laboratory tests. Additionally, in May 2018, the Air Force Epidemiology Laboratory changed HIV testing platforms and converted the HIV testing to the automation line. Changing to an automated process would improve the selection criteria scores for the quality factor in course of action 3, and ultimately its cost benefit index score.

With the change to its HIV testing platform and automating the process, the Air Force Epidemiology Laboratory's selection criteria scores would improve on five of the eight selection criteria categories for quality WRAIR personnel evaluated in the September 2018 BCA. For example, under the Air Force's prior HIV testing process, decapping specimens was only semi-automated, so WRAIR personnel ranked the Air Force laboratory as a two out of three in that selection criteria category; however, with the new fully automated process, the Air Force laboratory should be ranked a three for decapping. Two additional elements that WRAIR personnel evaluated for each course of action were being able to provide access to

*By automating its process and changing testing platforms, the Air Force Laboratory would now meet or exceed the contractor's scores in 9 of the 13 categories.*

data source files, and having raw data that supports data mining. According to Air Force personnel, they could meet both of these criteria, which would add two additional three out of three scores for those selection criteria categories.

Overall, the HDRL still outscored the Air Force Laboratory in 8 of the 13 selection criteria categories in the September 2018 BCA. However, by automating its HIV testing process and changing HIV testing platforms, the Air Force Epidemiology Laboratory would now meet or exceed the current contractor's scores in 9 of the 13 selection criteria categories.

### ***New HIV Testing Contract Strengthens Air Force Course of Action***

~~(FOUO)~~ The current HIV testing contract W81K04-15-D0006 ends on February 27, 2019. However, on October 2, 2018, MEDCOM personnel awarded a new 5-year contract to the current contractor. Contract W81K04-19-D0003 is effective February 28, 2019. The new contract price per HIV test is \$█, which is an increase of \$█ per test. Additionally, the contract requires a minimum order of \$█ and includes language that the Government plans to begin transitioning HIV testing from contractor-performed testing to in-house testing following the first year of performance. According to MEDCOM personnel, the contract allows flexibility for the Army to begin transitioning HIV testing earlier if necessary.

However, MEDCOM awarded the contract in October 2018 based on an acquisition plan that used the same outdated information for the Air Force Epidemiology Laboratory as the September 2018 BCA. The acquisition plan was approved on April 2, 2018, before Air Force personnel stated they moved HIV testing to a new automated platform in May 2018. However, the acquisition plan acknowledged that the Air Force planned to transition to a new test platform, which WRAIR personnel also acknowledged in the September 2018 BCA. MEDCOM and WRAIR personnel consistently used outdated information to make decisions regarding HIV testing.

~~(FOUO)~~ The Air Force Epidemiology Laboratory's estimated cost per HIV test is lower than the new contract cost per test. Specifically, the new contract cost per HIV test is \$█, while the Air Force estimates its current cost per test at \$█. Additionally the Air Force course of action had higher selection criteria scores than continuing testing at the contractor. According to Air Force personnel, the Epidemiology Laboratory already has the personnel and equipment necessary

~~(FOUO)~~ to recapture the 775,000 HIV screening tests currently performed by the Army contractor. As a result, MEDCOM may overpay for HIV testing if it continues using the current contractor after the period of performance ends on February 27, 2019.

*MEDCOM may overpay for HIV testing if it continues using the current contractor after the period of performance ends on February 27, 2019.*

The Army could save at least \$4.4 million per year if MEDCOM begins transitioning HIV testing to the Air Force Epidemiology Laboratory when the current contract ends on February 27, 2019. This transition process would allow MEDCOM time to identify and renovate leased space, which according to MEDCOM personnel could take at least 20 months. Therefore, the MEDCOM Chief of Staff should compare the HIV testing services provided by the Air Force to services performed under contract W81K04-19-D0003 and determine whether the Army should transition testing to the Air Force Epidemiology Laboratory when contract W81K04-15-D006's period of performance ends on February 27, 2019, until the Army Human Immunodeficiency Virus Diagnostics and Reference Laboratory is moved into leased space and can accept the full Army Human Immunodeficiency Virus testing mission. While the Army could save at least \$4.4 million per year, the actual amount of funds put to better use, Defense Health Program Operation and Maintenance Funds-97X0130, are undeterminable until MEDCOM takes action on the recommendation.

## Conclusion

Overall, MEDCOM corrected the problems identified in Report No. DODIG-2017-066, and as a result, the September 2018 BCA supported MEDCOM's decision to transfer HIV testing from the current contractor to the HDRL. Therefore, we closed the two prior recommendations. MEDCOM's preferred course of action ranked the highest when considering cost, quality, and readiness factors. However, while MEDCOM identifies and renovates a leased space for the HDRL to accept the entire Army HIV testing mission, it should consider transitioning HIV testing from the current contractor to the Air Force Epidemiology Laboratory to save the Army at least \$4.4 million per year in HIV testing costs.

## Recommendation, Management Comments, and Our Response

### **Recommendation 1**

**We recommend that the U.S. Army Medical Command Chief of Staff compare the Human Immunodeficiency Virus testing services provided by the Air Force Epidemiology Laboratory to services performed under contract W81K04-19-D0003 and determine whether the Army should transition testing to the Air Force Epidemiology Laboratory when contract W81K04-15-D0006's period of performance ends on February 27, 2019, until the Army Human Immunodeficiency Virus Diagnostics and Reference Laboratory is moved into leased space and can accept the full Army Human Immunodeficiency Virus testing mission. The comparison should be completed within 30 days of this final report.**

### *U.S. Army Medical Command Comments*

The MEDCOM Interim Chief of Staff agreed with the recommendation and stated that MEDCOM personnel would compare the Air Force's HIV testing services against contract W81K04-19-D0003 to determine whether the Army should transition testing to the Air Force until the Army moves its HIV laboratory into leased space and can accept the full Army HIV testing mission. The MEDCOM Interim Chief of Staff stated that this analysis would be completed by February 15, 2019. In addition, the MEDCOM Interim Chief of Staff stated that MEDCOM could not validate the potential monetary benefits presented in the report because the report did not include information demonstrating that the Air Force cost per test fully accounted for all costs. He further stated that the MEDCOM comparison will analyze whether costs savings can be achieved by using the Air Force Epidemiology Laboratory during the transition.

### *Our Response*

Comments from the Interim Chief of Staff addressed the recommendation and we acknowledge that MEDCOM personnel cannot validate the \$4.4 million in potential savings until MEDCOM completes its comparison of the services performed under the contract and the services provided by the Air Force. Therefore, the recommendation is resolved but will remain open. We will close this recommendation once we receive and review MEDCOM's comparison of the Air Force's HIV testing services against contract W81K04-19-D0003.

## Appendix

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### Scope and Methodology

We conducted this performance audit from August 2018 to December 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We interviewed personnel from the following organizations to determine the Military Departments' current HIV testing processes and plans for future HIV testing.

- Office of the Surgeon General, U.S. Army Medical Command
- U.S. Army Medical Research Acquisition Activity
- U.S. Army Medical Research and Materiel Command
- Walter Reed Army Institute of Research
- U.S. Air Force School of Aerospace Medicine, Public Health and Preventive Medicine Department, Public Health and Epidemiology Laboratory

To determine whether the Army met requirements for development of a BCA, we reviewed the following guidance.

- DoD Product Support Business Case Analysis Guidebook, 2011
- U.S. Army Cost Benefit Analysis Guide, 3rd Edition, updated as of April 24, 2013

To determine the Military Departments' HIV test program requirements and processes, we reviewed the following guidance.

- DoD Instruction 1332.45, "Retention Determinations for Non-Deployable Service Members," July 30, 2018
- DoD Instruction 6485.01, "Human Immunodeficiency Virus (HIV) in Military Service Members," June 7, 2013
- Assistant Secretary of Defense (Health Affairs) Policy Memorandum 04-007, "Human Immunodeficiency Virus Interval Testing," March 29, 2004
- Army Regulation 600-110, "Identification, Surveillance, and Administration of Personnel Infected With Human Immunodeficiency Virus," April 22, 2014
- Air Force Instruction 44-178, "Human Immunodeficiency Virus Program," March 4, 2014, certified current June 28, 2016

We reviewed the contracts that provide requirements over the contractor performing HIV testing. We also reviewed contracts over the procurement of personnel, equipment, supplies, and services used in HIV testing. Additionally, we reviewed cost estimates for bringing HIV testing into the HDRL and other courses of action, contractor quarterly site visit reports, the contractor's annual performance evaluation, contracting officer's representative monthly reports, and the BCAs. We reviewed leasing marketing materials, realtor quotes for leased space, and space requirements documents. We reviewed cost support, including General Fund Enterprise Business Systems extracts, organizational charts, and a memorandum of military composite pay rates. We also reviewed support for the alternative selection criteria used to evaluate the courses of action.

## Use of Computer-Processed Data

We did not use computer-processed data to perform this audit.

## Prior Coverage

During the last 5 years, the Department of Defense Office of Inspector General (DoD OIG) issued one report discussing HIV testing. Unrestricted DoD OIG reports can be accessed at <http://www.dodig.mil/reports.html/>.

### ***DoD OIG***

Report No. DODIG-2017-066, "Army Did Not Support Business Case Analysis Recommending Transition of Human Immunodeficiency Virus Testing," March 14, 2017

The DoD OIG recommended that the U.S. Army Medical Command Chief of Staff, re-perform the business case analysis for HIV testing and ensure the analysis:

- includes only the scope cited in the problem statement;
- uses accurate assumptions and current information and costs;
- includes three or more courses of actions and alternatives;
- consistently uses total costs associated with the project;
- uses well-defined and measurable alternative selection criteria; and
- is adequately documented and supported.

Additionally, the DoD OIG recommended that the U.S. Army Medical Command Chief of Staff, not enter into any leases to move Army laboratories until the business case analysis is re-performed.

# Management Comments

## U.S. Army Medical Command



DEPARTMENT OF THE ARMY  
OFFICE OF THE SURGEON GENERAL  
7700 ARLINGTON BOULEVARD  
FALLS CHURCH, VA 22042-5140

17 JAN 2019

MCIR

MEMORANDUM FOR Department of Defense Inspector General, 4800 Mark Center Drive, Alexandria, VA 22350-1500

SUBJECT: Response to the DODIG Follow-up Audit of Army's Business Case Analysis to Transition Human Immunodeficiency Virus Testing In-House (Project Number D2018-D000AW-0192.000)

1. OTSG/MEDCOM concurs with recommendation 1 of the subject draft report. We will perform a comparison of Human Immunodeficiency Virus (HIV) testing services provided by the Air Force Epidemiology Laboratory against contract W81K04-19-D-0003 to determine whether the Army should transition testing to the Air Force until the Army HIV Diagnostics and Reference Laboratory is moved into leased space and can accept the full Army HIV testing mission.
2. At this time, OTSG/MEDCOM cannot validate the potential monetary benefits presented in the report because the report did not include information demonstrating the Air Force cost per test fully accounted for all costs. Per DOD 7600.07-M, potential monetary benefit calculations should consider offset costs, which include all direct or indirect costs incurred during implementation. Costs under each course of action must be considered, as one of multiple factors, to ensure a fair and accurate comparison of services and potential benefits against the Army's stated requirements. The MEDCOM comparison will analyze whether cost savings can be achieved by using the Air Force Epidemiology Laboratory during the transition.
3. We anticipate completing the recommended comparison by 15 February 2019.
4. Our point of contact is [REDACTED], Internal Review and Audit Compliance Office, [REDACTED], or email [REDACTED].

FOR THE SURGEON GENERAL:

*Richard R. Beauchemin*  
RICHARD R. BEAUCHEMIN  
Interim Chief of Staff

## Acronyms and Abbreviations

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<b>BCA</b>	Business Case Analysis
<b>CBA</b>	Cost Benefit Analysis
<b>HIV</b>	Human Immunodeficiency Virus
<b>HDRL</b>	HIV Diagnostics and Reference Laboratory
<b>MEDCOM</b>	U.S. Army Medical Command
<b>WRAIR</b>	Walter Reed Army Institute of Research

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703.604.8324

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Alexandria, Virginia 22350-1500  
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