



June 2017

GULF WAR ILLNESS

Improvements Needed for VA to Better Understand, Process, and Communicate Decisions on Claims

GAO Highlights

Highlights of [GAO-17-511](#), a report to congressional requesters

Why GAO Did This Study

VA estimates that 44 percent of veterans who served in the Persian Gulf War in 1990-91 have medical issues commonly referred to as Gulf War Illness and that those who have been deployed to Southwest Asia since then may suffer from similar medical issues. These medical issues may entitle a veteran to VA benefits. Recently, questions have been raised about whether VA is processing GWI claims correctly. GAO was asked to review VA's handling of these claims.

This report examines (1) recent trends in GWI disability claims, (2) challenges associated with accurately processing and clearly communicating decisions on GWI claims, and (3) how VA uses GWI research to inform the disability compensation program. GAO reviewed relevant federal laws, regulations, and guidance; analyzed VA data on GWI-related claim decisions from fiscal years 2010–2015 (the most recent data available); visited 4 of 58 regional offices, choosing those with high GWI caseloads; and interviewed headquarters and regional VA staff and key stakeholders. GAO also reviewed a non-generalizable sample of 44 claim files to provide illustrative examples of how VA evaluated and communicated decisions on GWI claims.

What GAO Recommends

GAO recommends that VA require GWI training for medical examiners, improve its decision letters, and develop a plan to establish a single GWI case definition. VA agreed with GAO's recommendations.

View [GAO-17-511](#). For more information, contact Melissa Emrey-Arras at (617) 788-0534 or emreyarrasm@gao.gov.

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What GAO Found

The Department of Veterans Affairs (VA) completed processing about 11,400 Gulf War Illness (GWI) claims in fiscal year 2015, which was more than double the 4,800 claims processed in fiscal year 2010. GWI is a collective term for certain medical conditions among veterans who have served in Southwest Asia since 1990. Symptoms of GWI can include joint pain, gastrointestinal problems, fatigue, and neurological problems. On average, GWI claims have twice as many medical issues per claim as other disability claims, and take 4 months longer to complete. During fiscal years 2010 through 2015, the most recent data available at the time of our review, approval rates for GWI claims were about three times lower than for all other claimed disabilities. Several factors may contribute to lower approval rates, including that—according to VA—GWI claims are not always well understood by VA staff and veterans sometimes file for benefits without medical records to adequately support their claim.

VA's ability to accurately process GWI claims is hampered by inadequate training, and its decision letters for denied claims do not communicate key information to veterans. VA claims rating staff often rely on VA medical examiners to assess a veteran's disability before a decision can be made on a claim. VA medical examiners told GAO that conducting Gulf War general medical exams is challenging because of the range of symptoms that could qualify as GWI. VA has developed elective GWI training for its medical examiners, but only 10 percent of examiners had taken the training as of February 2017. Federal internal control standards call for adequate training for staff so they can correctly carry out an agency's procedures. Medical examiners who do not take this GWI-specific training may not be able to provide information to VA staff to correctly decide whether to grant a veteran's claim. Once a determination is made, VA regulations also require clear explanations to veterans regarding claim decisions. GAO found that decision letters for GWI claims do not always include key information on why the claim was denied.

VA considers research when adding to the list of conditions it associates with Gulf War service, but it does not have a plan to develop a uniformly used case definition of GWI. In 2010, VA added nine infectious diseases to the list of GWI-related conditions. VA advisory groups noted, however, that researchers face obstacles in conducting GWI research, including the lack of a single case definition of the illness for research and treatment purposes. In its 2015 Gulf War Research Strategic Plan, VA included an objective to develop a single case definition, but an official told GAO that VA had no action plan in place to achieve it. Without a plan to achieve a single case definition, research on and treatment for GWI may continue to progress slowly.

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Abbreviations

VA	Department of Veterans Affairs
VBA	Veterans Benefits Administration
VHA	Veterans Health Administration

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June 29, 2017

The Honorable Jack Bergman
Chairman
Subcommittee on Oversight & Investigations
Committee on Veterans' Affairs
House of Representatives

The Honorable Mike Coffman
House of Representatives

The Persian Gulf War in 1990-1991—known as Operations Desert Storm and Desert Shield—was the beginning of the U.S. military's involvement in a series of Gulf War conflicts that continue to this day. The Department of Veterans Affairs (VA) estimates that 44 percent of the nearly 700,000 service members who served in 1990–1991 in the Persian Gulf War now have what is commonly referred to as Gulf War Illness—a cluster of chronic symptoms that can include fatigue, headaches, joint pain, indigestion, insomnia, respiratory disorders, skin problems, and memory impairment. The exact causes of the illness are not always known and symptoms among these veterans vary widely.

VA provides disability compensation benefits to veterans with disabling conditions that were incurred during or aggravated by their military service. VA's Veterans Benefits Administration (VBA) determines veterans' eligibility and payment amounts based on medical records and examinations, military service records, and other evidence. As part of reviewing evidence to decide the claim, VBA staff may request a medical examination if they deem it necessary. To support the disability claim process, medical examiners at VA's Veterans Health Administration (VHA) conduct medical exams of veterans at VA health care facilities.

For Gulf War Illness-related disability compensation, however, VA can award benefits to certain veterans who have served in a Gulf War conflict from 1990 and display certain Gulf War Illness symptoms without the veteran having to prove the symptoms are related to their military service. Even so, VBA may request a medical examination from VHA to assess the severity of the veteran's disability. According to VBA officials, VA does not publicly report on the total number of Gulf War veterans who receive disability compensation benefits for Gulf War Illness. For years, members of Congress have questioned VA's treatment of Gulf War Illness, and veterans' advocacy organizations have noted that the claims are not well

understood by VA staff, are difficult for the veteran to substantiate, and are denied at higher rates than other claims. You requested information on VA's processing of Gulf War Illness disability claims. This report examines (1) trends in Gulf War Illness disability claims in recent years, (2) challenges associated with accurately processing and clearly communicating decisions on Gulf War Illness disability claims, and (3) how VA uses Gulf War Illness research in its disability compensation program.

To identify trends in Gulf War Illness disability claims, we analyzed VBA administrative data from fiscal year 2010 through 2015 (the most recent data available at the time of our review) on the number of completed Gulf War Illness claims and their approval rates. We assessed the reliability of VA's administrative data used in our analysis by performing electronic testing, reviewing documentation about the data and the system that produced them, and interviewing agency officials knowledgeable about the data. We determined these data were sufficiently reliable for the purposes of our reporting objectives and have noted in our report any limitations that are associated with the data we present on trends in Gulf War Illness claims decisions.

To identify challenges associated with accurate processing of Gulf War Illness claims and clearly communicating decisions on those claims, we compared VA's processes against the agency's internal guidance and federal internal control standards. We also interviewed VBA and VHA officials responsible for developing and implementing guidance, training, and quality assurance related to Gulf War Illness claims. We visited 4 of VBA's 58 regional offices and nearby VHA health care facilities at each location to gain perspectives of the staff who process and evaluate Gulf War Illness claims.¹ We also reviewed a non-generalizable sample of 44 claim files that were completed in fiscal year 2015 from the 4 regional offices we visited to provide illustrative examples of how VBA processes and communicates decisions about Gulf War Illness claims.² Specifically, we compared Gulf War Illness decision letters to VA's guidance on preparing these letters.

¹We visited the Cleveland, Ohio; Seattle, Washington; St. Petersburg, Florida; and Waco, Texas regional offices. These offices were in the top quarter of VBA's regional offices in terms of the number of Gulf War Illness claims completed in fiscal year 2015 and were geographically dispersed.

²We randomly selected claim files that had recently been closed at the time of our visit and included both approvals and denials.

To examine how VA uses Gulf War Illness research in its disability compensation program, we reviewed relevant federal laws and regulations and VA's Gulf War Research Strategic Plan, and we interviewed VA officials responsible for VA's Gulf War research program, as well as VA clinicians and medical researchers. We also reviewed recent Gulf War Illness-related reports and recommendations made to VA from internal task forces, external advisory groups, and the National Academy of Medicine (formerly the Institute of Medicine), and we compared VA's actions to federal internal control standards. For additional details on our scope and methodology, see appendix I.

We conducted this performance audit from October 2015 to June 2017 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.

Background

What Is Known about Gulf War Illness

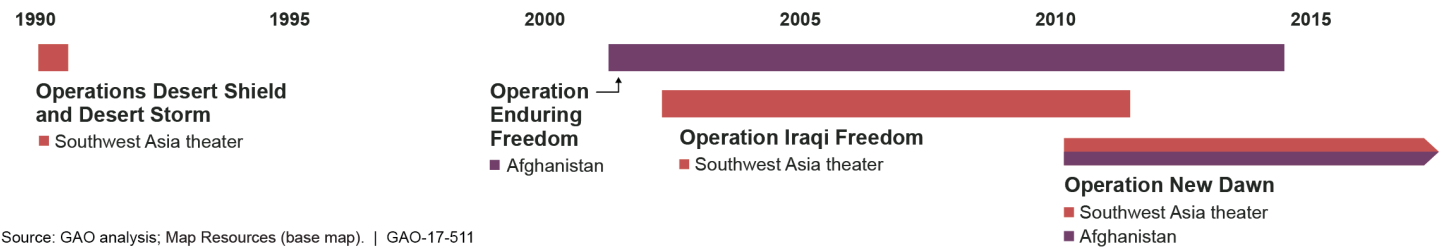
Since the Persian Gulf War began 27 years ago, the U.S. military has maintained a continuing presence in Southwest Asia (see fig. 1).³

³For purposes of laws governing veterans' benefits, the Persian Gulf War began on August 2, 1990, and runs through a date to be prescribed by presidential proclamation or law. Since 2001, U.S. troops have also been stationed in Afghanistan.

Figure 1: Locations and Timeline of Major U.S. Gulf War Conflicts



Timeline of Gulf War conflicts



Source: GAO analysis; Map Resources (base map). | GAO-17-511

Note: VA defines the Southwest Asia theater of operations to include Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations. 38 C.F.R. § 3.317(e)(2).

According to VA, more than 1.1 million U.S. service members have been deployed to the region since the start of the Persian Gulf War.⁴ Since returning, many of these veterans have experienced medical issues unique to their service in the Southwest Asia theater of operations.⁵ According to VA, service members and veterans began reporting symptoms after their return from service in the Persian Gulf War in 1991.⁶ The exact cause of the symptoms was unknown, but according to the Department of Defense, U.S. troops might have been exposed to a variety of potentially hazardous substances, such as pesticides, smoke from oil well fires, and depleted uranium that could be linked to their medical conditions. The symptoms Gulf War veterans were describing did not correspond easily to recognized categories of diseases, and presented a problem for health care diagnoses and treatment procedures, as well as for VBA staff who evaluate disability compensation claims. Because the problem involved a significant percentage of Gulf War veterans—at the time, estimated at 25 percent—VA initiated research seeking to explain these chronic illness patterns.

VA can provide disability compensation benefits to Gulf War veterans under different circumstances than for other veterans. Federal law generally entitles veterans with diseases or injuries incurred or aggravated in active military service to disability compensation benefits if the veteran can prove they were related to their service (i.e., service connected disability).⁷ For any veteran with certain illnesses who served in Southwest Asia from 1990 to the present, however, VA can provide disability compensation without the veteran needing to prove their illnesses were caused or aggravated by service. Rather, VA “presumes”

⁴Department of Veterans Affairs, *Gulf War Veterans Information System* (Washington, D.C.: August 2008). This report was released by VA in February 2009 and VA has not since reported on the number of service members who were deployed to the Southwest Asia theater of operations.

⁵Although most studies have focused specifically on the cohort of 1990-1991 Persian Gulf War veterans, according to VA, hazardous exposures may also be widespread in the current theater of Gulf War operations and may contribute to the disability patterns typically associated with Southwest Asia service.

⁶We first reported on the quality of the treatment and diagnostic services provided to Gulf War veterans by VA and the Department of Defense in 1997. See GAO, *Gulf War Illnesses: Improved Monitoring of Clinical Progress and Reexamination of Research Emphasis Are Needed*, [GAO/NSIAD-97-163](#) (Washington, D.C.: June 23, 1997). We include a list of related GAO products at the end of this report.

⁷See 38 U.S.C. §§ 1110 and 1131. This does not include disabilities incurred by a veteran’s own willful misconduct or abuse of alcohol or drugs.

these illnesses were due to their service in the Southwest Asia theater of operations (i.e., a presumptive service connection). Specifically, VA provides disability compensation benefits to veterans who served in Southwest Asia for illnesses that fall into the following three categories:⁸

- (1) Undiagnosed illnesses (established in 1994);⁹
- (2) Medically unexplained chronic multisymptom illnesses (established in 2001);¹⁰ and
- (3) Nine specific infectious diseases (established in 2010).¹¹

Each of these categories includes many symptoms or illnesses that could qualify a veteran for benefits (see fig. 2). Because symptoms vary widely, VA prefers not to use the term “Gulf War Illness,” though it is often referred to as such by VA clinicians and in medical literature.¹² We will collectively refer to disability claims for these three categories of illnesses as Gulf War Illness claims.

⁸Veterans with specific infectious diseases may also have served in Afghanistan at any time since September 19, 2001.

⁹Pub. L. No. 103-446, § 106(a), 108 Stat. 4645, 4650 (1994).

¹⁰Pub. L. No. 107-103, § 202(a), 115 Stat. 976, 988 (2001).

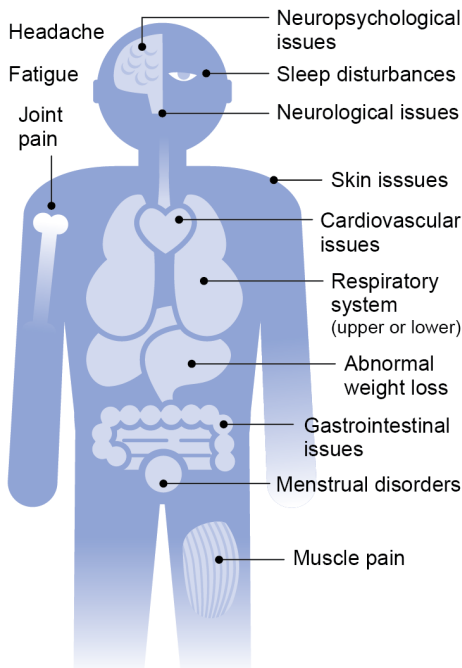
¹¹Presumptions of Service Connection for Persian Gulf Service, 75 Fed. Reg. 59,968 (Sept. 29, 2010) (codified at 38 C.F.R. § 3.317). The infectious diseases are brucellosis, campylobacter jejuni, coxiella burnetti (Q fever), malaria, mycobacterium tuberculosis, nontyphoid salmonella, shigella, visceral leishmaniasis, and West Nile virus.

¹²In 2015, VA’s Office of Research and Development officially adopted the term “Gulf War Illness presenting as chronic multisymptom illness” to describe symptoms of undiagnosed illness or medically unexplained chronic multisymptom illness.

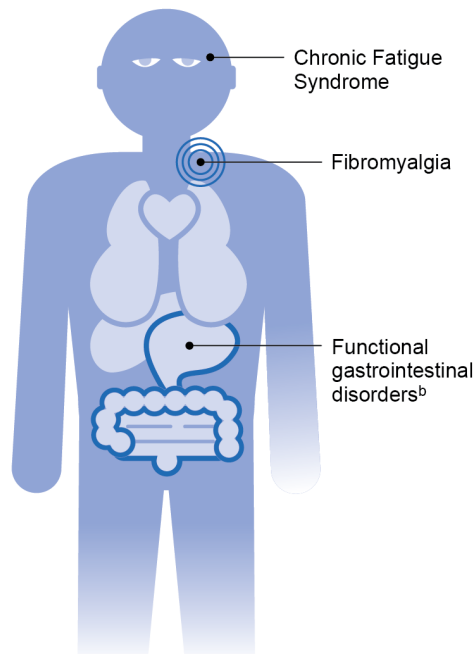
Figure 2: Symptoms and Medical Issues the Department of Veterans Affairs (VA) Associates with Gulf War Illness

There are three categories of Gulf War Illness according to Department of Veterans Affairs (VA) regulations:

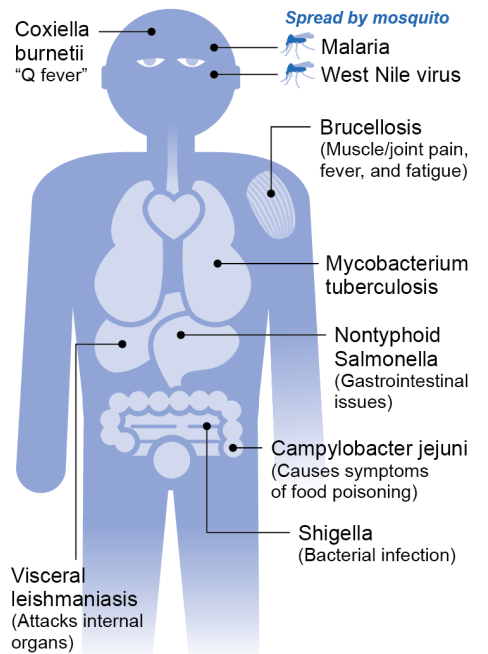
Undiagnosed illness signs/symptoms^a



Medically unexplained chronic multisymptom illness



Certain infectious diseases



Source: GAO analysis of 38 C.F.R. § 3.317. | GAO-17-511

Note: The symptoms of undiagnosed illness and the chronic multisymptom illnesses are examples—not an exhaustive list—of medical issues that veterans with Gulf War Illness can be compensated for with a presumption of being service connected.

^aThe symptoms listed below may be manifestations of either undiagnosed illness or medically unexplained chronic multisymptom illness. For simplicity, these symptoms are listed only once, under the category of undiagnosed illness.

^bIrritable bowel syndrome is one common type of functional gastrointestinal disorder.

VA's Disability Compensation Process for Gulf War Illness Claims

All three categories of Gulf War illnesses (undiagnosed illness, medically unexplained chronic multisymptom illness, and infectious diseases) are presumed to be related to a veteran's service in the Gulf War. For infectious disease claims, however, the process for evaluating the claim can be different than for undiagnosed illnesses and medically unexplained chronic multisymptom illnesses. Claims related to infectious diseases are generally more straightforward for VBA to process because they are diagnosable conditions related to known exposures in Southwest Asia. If a veteran is diagnosed with one of the qualifying infectious

diseases and meets the other criteria in the law, their claim will be granted on a presumptive basis.

Claims for undiagnosed illness and medically unexplained chronic multisymptom illness can be more complicated for VBA to process, in part, because of the largely unknown nature of the exposures that cause the symptoms and the wide variation in symptoms among veterans.¹³ To qualify for disability compensation under a presumptive service connection based on symptoms of undiagnosed illness or medically unexplained chronic multisymptom illness, veterans must meet certain criteria (in addition to certain criteria all veterans must meet to qualify for disability compensation):¹⁴

- (1) They must have served on active military duty in the Southwest Asia theater of operations at any time from August 2, 1990, to the present.
- (2) They must have a chronic disability resulting from an undiagnosed illness, a medically unexplained chronic multisymptom illness, or a combination of both, that manifested either during active duty or to a degree of 10 percent or more not later than December 31, 2021.¹⁵

For these two categories of Gulf War Illness claims, VBA Rating Veteran's Service Representatives—claims raters—often rely on information from VHA medical examiners to support their decision on whether to grant or deny a claim. If claim raters determine a medical

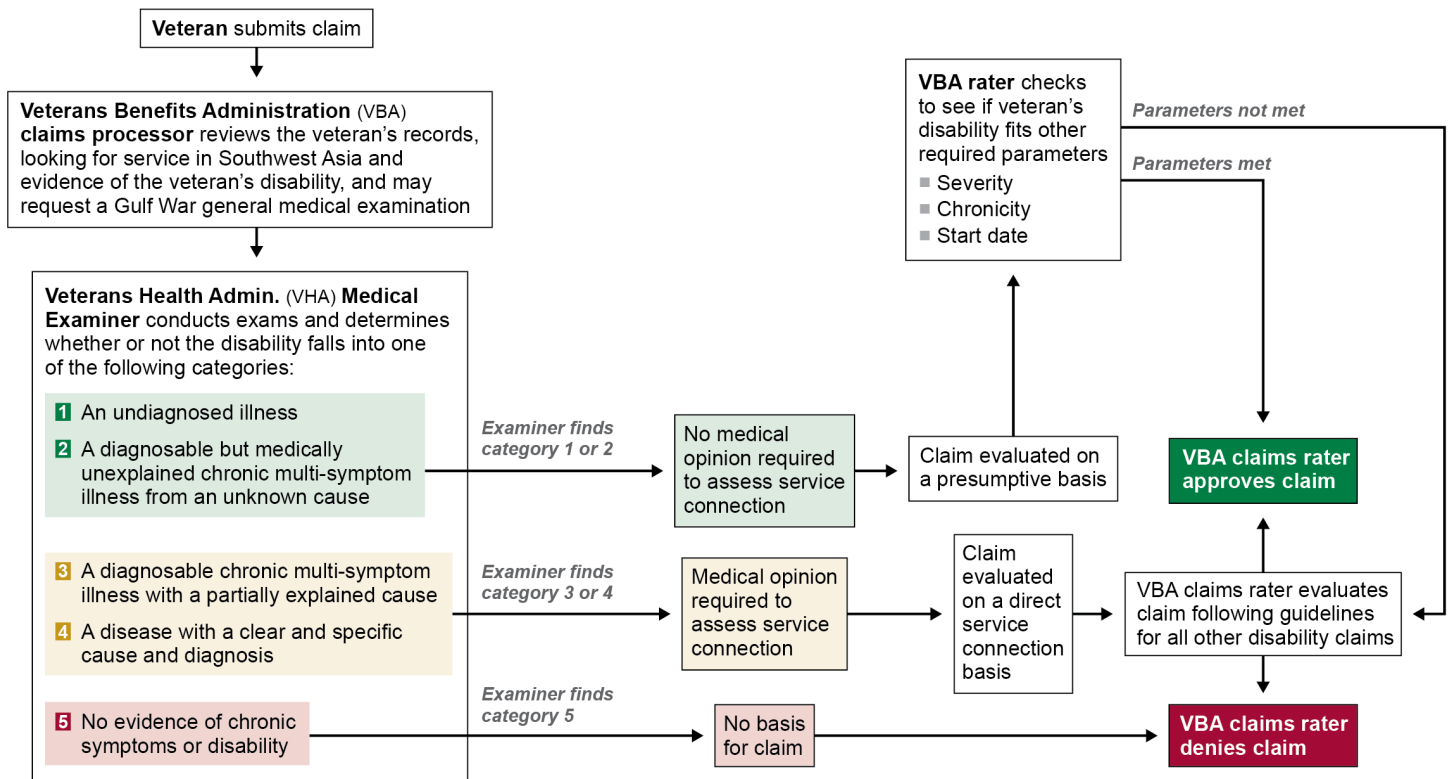
¹³In 2010, VBA notified its regional office staff of specific environmental hazard exposures—burn pits and large fires that released chemical toxins into the air, water, or soil—experienced by veterans who served in the Southwest Asia theater of operations or Afghanistan since 2001 that may qualify a veteran for disability compensation benefits. Disability claims related to burn pit or other known environmental hazards are evaluated by VBA in the same manner as other claims depending on the specific symptoms or illnesses claimed by the veteran. Depending on the symptoms and illnesses, claims due to burn pit exposure may be processed as Gulf War Illness claims.

¹⁴Additional qualifying criteria for veterans disability compensation benefits include evidence of a disabling condition that was not the result of the veteran's willful misconduct or abuse of alcohol or drugs, and that the veteran was discharged or released under conditions other than dishonorable.

¹⁵VA considers an illness(es) or symptom(s) to be chronic if it has been exhibited intermittently or constantly for 6 months or more. VBA assigns ratings of 0 to 100 percent disability in increments of 10 percentage points based on the severity of the disability. This rating percentage then determines the monthly payment amount the veteran will receive.

exam is warranted, it can play an important role in determining whether a claim is Gulf War Illness-related. See figure 3 for an overview of the process for evaluating claims for undiagnosed illnesses and medically unexplained chronic multisymptom illnesses.

Figure 3: Department of Veterans Affairs (VA) Disability Compensation Claim Process for Undiagnosed Illness and Medically Unexplained Chronic Multisymptom Illness Claims



Source: GAO analysis of U.S. Department of Veterans Affairs (VA) guidance. | GAO-17-511

Note 1: Diagram describes process for veterans with symptoms of undiagnosed illness and medically unexplained chronic multisymptom illness claims only, because these claims are typically related to unknown exposures and medical evaluations are conducted to support the claim. If a veteran was exposed to a burn pit or other known environmental hazard, the symptoms or illnesses the veteran is claiming may be evaluated under the above process for presumptive service connection if the veteran meets certain criteria.

Note 2: Claims that fall into categories (1) and (2) would be considered presumptively as Gulf War Illnesses, and claims that fall into categories (3) and (4) would not.

The medical examiner conducts an exam of the veteran and reviews the veteran's medical records to determine whether the veteran has a chronic disability pattern. If there is no record of prior treatment in the medical records and no other evidence in the claim file documenting symptoms

associated with undiagnosed illnesses or chronic multisymptom illnesses, then there is no evidence of a chronic disability and no basis for granting the claim. However, if a medical examiner finds evidence of a chronic disability or illness, they must indicate in the exam report whether the veteran has:

- (1) an undiagnosed illness,
- (2) a diagnosable but medically unexplained multisymptom illness of unknown causes,
- (3) a diagnosable multisymptom illness with a partially understood cause (which is not rated on a presumptive basis as a Gulf War Illness), or
- (4) a disease with a clear and specific cause and diagnosis (which is not rated on a presumptive basis as a Gulf War Illness).

Depending on which of these categories the medical examiner determines the veteran's disability falls into, it may be necessary for the examiner to include in the exam report a medical opinion as to whether the condition may have been caused by their service.¹⁶ If the medical examiner determines the veteran's disability pattern is either category (1) or (2)—presumptive conditions—then no medical opinion on potential service connection from the examiner is necessary as these conditions are presumed to be caused by service in the Southwest Asia theater of operations. If the medical examiner determines that the veteran's disability pattern is either category (3) or (4), then they are not considered presumptive conditions, and the medical examiner is instructed to include their medical opinion with supporting rationale as to whether the veteran's disability pattern is "at least as likely as not" related to the veteran's service.¹⁷

¹⁶According to VA, a medical opinion for disability benefits purposes is a conclusion provided by the medical examiner and supported by evidence, based on current medical literature and on examination and evidence in the claims file, and is supported by an educated, well-reasoned rationale. A medical opinion may be based on review of the claimant's medical records or personal examination of the claimant, or both.

¹⁷Specifically, the VBA guidance to medical examiners asks the examiner to provide an opinion as to whether the veteran's disability pattern or diagnosed disease is related to a specific exposure event experienced by the veteran during service.

The VBA claims rater will review all of the evidence, including any Gulf War general medical examination report completed by VHA and other evidence in the veteran's claim file, to determine eligibility for compensation. If the medical examiner's report indicates the veteran's illness or symptoms should be in category (1) or (2), the claims rater can presumptively award benefits for Gulf War Illness (as long as all other requirements are met). However, if the medical examiner's report indicates the veteran's illness or symptoms should be placed into category (3) or (4), the claims rater will evaluate the claim under the direct service connection method. For the purposes of this report, claims that fall into categories (3) and (4) would not be considered Gulf War Illnesses.

For all disability claims, VBA claim processing staff are required to explain the reason for each claim decision in a decision letter. VBA sends the decision letter to the veteran notifying the veteran of the decision, as well as a notice of the veteran's rights should they disagree with VBA's decision. According to VA regulations, decision letters should clearly state (1) the decision made; (2) any applicable effective date; (3) the reason(s) for the decision; (4) a claimant's right to a hearing on any issue involved in the claim; and (5) a claimant's right of representation and the right to appeal the decision, including procedures and time limits.¹⁸

Prior VA Efforts to Improve Services for Gulf War Veterans

In 2009, the Secretary of VA established an internal Gulf War Veterans' Illnesses Task Force with participation from across the agency to conduct a comprehensive review of all VA programs and services that serve the cohort of 1990-1991 Persian Gulf War veterans. The Task Force was charged with identifying gaps and opportunities to improve programs and services, as well as providing recommendations to address the needs of this veterans' cohort. This Task Force released its first report, including recommendations, in September 2010 and its last report in January 2014. Following the release of the 2014 Task Force report, VA's Chief of Staff established a different internal workgroup to review, validate, and recommend a strategy to address Gulf War veterans' needs and concerns.¹⁹ According to a June 2014 report published by this internal

¹⁸38 C.F.R. § 3.103(b)(1). A veteran may appeal, in succession, to the Board of Veterans' Appeals, the U.S. Court of Appeals for Veterans Claims, the U.S. Court of Appeals for the Federal Circuit, and finally, the Supreme Court of the United States. A veteran can also request that VBA reopen a previously denied claim based on new and material evidence.

¹⁹This workgroup met from February through June 2014.

workgroup, VA had yet to implement many recommendations related to programs and services for Gulf War veterans made by internal task forces and external advisory committees to senior VA leadership over the years. In June 2014, this workgroup’s environmental scan identified several deficiencies regarding VA’s response to Gulf War Illness, including that there is:

- no overarching Department-level strategy for Gulf War veterans;
- no well-coordinated process for receiving recommendations or implementing plans to respond to recommendations; and
- no clear consensus on a single case definition for Gulf War Illness.

The workgroup recommended that VA take a more coordinated and integrated approach to addressing persistent gaps in VA’s strategy to care for Gulf War veterans, and identified steps for VA to take to ensure the agency follows up on its stated plans.²⁰

VA’s Gulf War Illness Research Program

From fiscal years 1994 through 2015, VA has funded more than \$160 million dollars of Gulf War Illness-related medical research, with \$12.3 million in funding for fiscal year 2016.²¹ VA has two offices—both located within the VHA—that conduct Gulf War Illness research: the Offices of Research and Development, and Post-Deployment Health. The Office of Research and Development administers VA’s Gulf War Illness research program, including setting the strategic direction, developing requests for applications, evaluating and awarding funds, and overseeing ongoing research grants. Post-Deployment Health conducts research on the potential causes and treatment for Gulf War Illness in a clinical setting, while working directly with veterans. VHA also provides funding to intramural researchers, many of whom are physicians employed by the VA healthcare system.

In 1998, legislation was enacted that required VA to seek to enter into an agreement with the National Academy of Sciences to study topics related

²⁰Department of Veterans Affairs, *Gulf War Veterans Workgroup Report*, February 2014 – June 2014 (Washington, D.C.: June 2014).

²¹The Department of Defense’s Congressionally Directed Medical Research Programs also funds investigator-initiated research on the pathobiology, diagnosis, and treatment for Gulf War Illness. According to a recent research funding announcement, in fiscal year 2016, its Gulf War Illness Research Program appropriation totaled \$20 million.

to Gulf War Illness.²² Since 2000, the National Academy of Medicine has published a series of reports related to Gulf War Illness that review the scientific and medical literature regarding the associations between illnesses, and exposure to toxic agents, environmental or wartime hazards, and preventative medicine or vaccines associated with Gulf War service.²³ Recommendations from these reports are submitted to the Secretary of VA for consideration.

In 2002, VA established a Research Advisory Committee on Gulf War Veterans' Illnesses to provide advice and make recommendations to the VA on proposed Gulf War Illness research studies, plans, and strategies. This Committee convenes members appointed by VA, including veterans, veterans' advocates, and members of the medical and scientific communities both within and outside of VA, and it holds public meetings to discuss topics related to VA's Gulf War Illness research. Since its inception, the Research Advisory Committee on Gulf War Veterans' Illnesses has produced more than a dozen reports and made many recommendations to the Secretary of VA on the agency's Gulf War Illness research activities. In 2004, due in part to continued concerns and additional Department of Defense reports of hazards and toxins Gulf War veterans may have been exposed to during their deployment, we reported on the status of federal research and investigations into Gulf War illnesses, and found that the federal Gulf War Illness research strategy needed reassessment.²⁴ Since that time, VHA developed a Gulf War Research Strategic Plan, which was last updated in 2015, to guide its overall priorities for Gulf War Illness research.

According to VA and a 2016 National Academy of Medicine report, while much progress has been made in Gulf War Illness research, more work remains to be done to understand the health effects from Gulf War service, as well as the specific causes and potential treatments.²⁵ The

²²Pub. L. No. 105-277, § 1603, 112 Stat. 2681, 2681-745 (1998).

²³The National Academy of Medicine was established in 1970 under the charter of the National Academy of Sciences to advise the nation on medical and health issues. The National Academies of Sciences, Engineering, and Medicine are private, nongovernmental institutions that work together to provide independent, objective advice to the nation about complex problems and to inform public policy decisions.

²⁴See GAO, *Department of Veterans Affairs: Federal Gulf War Illnesses Research Strategy Needs Reassessment*, [GAO-04-767](#) (Washington, D.C., June 1, 2004).

²⁵National Academies of Sciences, Engineering, and Medicine, *Gulf War and Health, Volume 10: Update of Health Effects of Serving in the Gulf War*, (Washington, D.C.: The National Academies Press, 2016).

National Academy of Medicine noted that this is, in part, because military records—including deployment, vaccination, and exposure records—can be unreliable, which results in researchers oftentimes having to rely on self-reported data, which is susceptible to memory failings and recall bias.²⁶ In addition, nearly 30 years have passed since the beginning of the Gulf War, and it is becoming harder to distinguish between the effects of Gulf War Illness on veterans' bodies and the normal aging process. For example, many illnesses associated with Gulf War Illness, such as joint pain, fatigue, and memory problems, are common in the general population and can also be associated with aging. In October 2016, VA cited the continued scientific uncertainty surrounding the causes and symptoms of the illnesses suffered by Gulf War veterans when it extended the time frames in which medical issues can manifest for the purposes of receiving disability compensation from the end of 2016 to the end of 2021.

²⁶In 2000, the National Academy of Medicine stated that one of the most important lessons of the Persian Gulf War is the need for accurate record keeping of what happens to soldiers in war and that poor medical record keeping practices on exposures experienced by deployed soldiers have seriously hindered Gulf War Illness research. See National Academy of Sciences, *Gulf War and Health: Volume 1: Depleted Uranium, Sarin, Pyridostigmine Bromide, Vaccines* (Washington, D.C.: National Academy Press, 2000). GAO has also reported on the poor quality of military health records. See GAO, *Military Personnel: Army Needs to Better Enforce Requirements and Improve Record Keeping for Soldiers Whose Medical Conditions May Call for Significant Duty Limitations*. [GAO-08-546](#) (Washington, D.C.: June 10, 2008).

In Recent Years, Completed Gulf War Illness Claims Have Risen, Included More Medical Issues, and Been Approved at Lower Rates Than Other Service-related Disabilities

The Number of Completed Gulf War Illness Claims Generally Increased from Fiscal Years 2010 - 2015

The number of Gulf War Illness claims VBA completed more than doubled from about 4,800 in fiscal year 2010 through 2015, increasing from to 11,400 during this time.²⁷ Our analysis of VBA claims data revealed that VBA completed about 42,000 Gulf War Illness claims in total during fiscal years 2010-2015.²⁸ These claims included nearly 75,000 undiagnosed illnesses, 27,000 medically unexplained chronic multisymptom illnesses, and 400 infectious diseases.

At the same time, however, the number of completed claims with Gulf War Illness medical issues—specifically those for medically unexplained chronic multisymptom illnesses—may be underreported due to unclear guidance and inconsistent data entry over time by VBA’s claim rating staff. According to VBA officials, medically unexplained chronic multisymptom illnesses are only identified in the database as Gulf War Illness-related if VBA claim raters identify them as such. Several claim

²⁷The data in this section include both original and reopened claims processed by VBA and do not include appeals on disability claims processed by the Board of Veterans’ Appeals. VBA may reopen a claim that it previously made a determination on when a veteran submits new and material evidence that was not considered during the original evaluation. The number of all other disability claims VBA completed processing also increased during this time—from about 1 million claims in fiscal year 2010 to about 1.5 million completed in fiscal year 2015.

²⁸These data are collected through VA’s Veterans Benefits Management System-Rating database. The analysis of Gulf War Illness claims’ data in this section of the report includes disability claims that VBA staff have identified as Gulf War Illness claims in the database. A veteran may have filed multiple claims with VA, and each claim may include multiple medical issues related to Gulf War Illness.

raters and VBA officials told us that staff had not been consistently identifying these medical issues as Gulf War Illness-related. In July 2016, during the course of our review, VBA officials told us they updated guidance to clarify that claims raters should use existing Gulf War Illness-related codes to record their rating decisions about medically unexplained chronic multisymptom illnesses in the VBA database.²⁹ They said this clarification is intended to improve tracking of these medical issues moving forward.

We found that the approval rate for the group of potentially unidentified medically unexplained chronic multisymptom illness medical issues was nearly identical to the approval rate for those that VA had identified as Gulf War Illness medical issues. We tested the data to determine the potential magnitude of the underreporting in the number of Gulf War Illness-related chronic multisymptom illness medical issues and found approximately 57,000 that may not have been identified in VBA's data as Gulf War Illness-related medical issues.³⁰ According to officials, VBA is not planning to correct these data from prior years, but it acknowledges the importance of tracking Gulf War Illness medical issues better in the future and expects that the updated guidance will improve future reporting.

Gulf War Illness Claims Included More Medical Issues and Took Longer to Complete

In each year from fiscal years 2010 through 2015, Gulf War Illness claims averaged about twice the number of medical issues (about nine per claim) than all other claims completed (about four). A medical issue is an illness or condition that a veteran alleges was caused or worsened by their military service and may entitle them to disability benefits. A veteran can submit a claim that includes multiple medical issues that they would like VBA to evaluate for disability compensation purposes. VBA claim

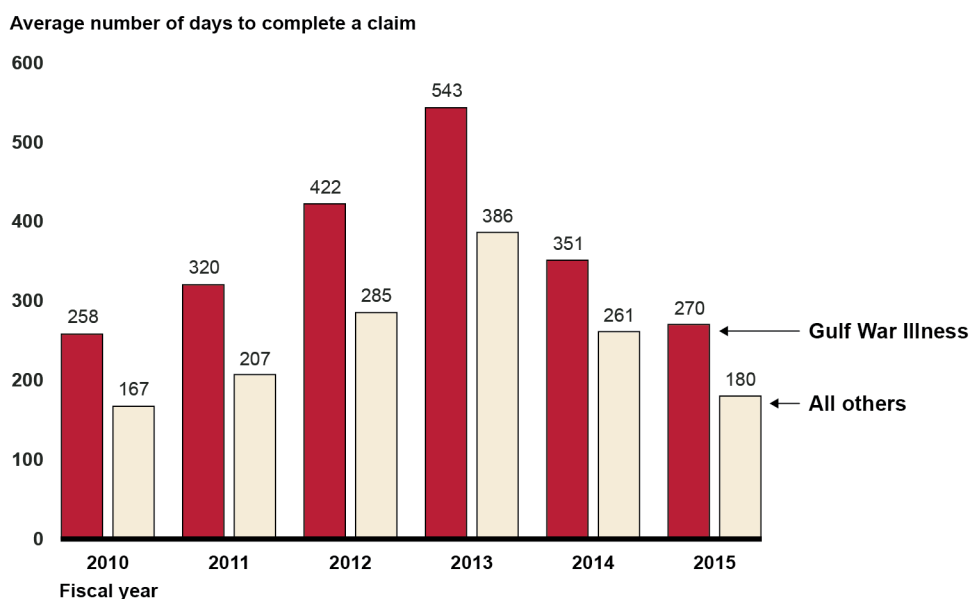
²⁹Officials stated they made these changes in part because of our questions during the course of this review about their ability to reliably identify all Gulf War Illness medically unexplained chronic multisymptom illness claims in their data.

³⁰To identify this population, we counted the number of medical issues in our dataset from veterans whom VBA identified as having served in the Southwest Asia theater of operations that contained one of the diagnostic codes associated with chronic multisymptom illnesses, but that were not flagged as Gulf War Illness medical issues in the data. The number of veterans associated with claims for these medical issues was about 41,000, because veterans can file a single claim containing multiple medical issues.

rating staff review each medical issue on a claim to make a determination to award or deny benefits to the veteran.³¹

While the processing time to evaluate each medical issue may vary, claims with more medical issues typically take longer to complete.³² From fiscal years 2010-2015, Gulf War Illness claims took about 4 months longer for VBA to complete than all other types of claims, averaging about 1 year compared to about 8 months from date of filing to completion. The time to complete all claims began to decrease in 2014 (see fig. 4).

Figure 4: Average Number of Days to Complete Gulf War Illness Claims versus All Other Claims from Fiscal Years 2010-2015



Source: GAO analysis of U.S. Department of Veterans Affairs (VA) data. | GAO-17-511

According to VBA, the decline in the average number of days to complete a claim may be due in part to the transformation plan it fully implemented in fiscal year 2013, which, among other things, introduced new paperless

³¹VBA staff can combine multiple medical issues submitted by the veteran to evaluate and rate them together depending on the outcome that would be most favorable to the veteran.

³²According to our analysis of VBA data, Gulf War Illness claims with eight or more medical issues took on average 1 month longer to complete than Gulf War Illness claims with seven or fewer medical issues.

technology for processing disability claims more quickly. While the average time for VBA to complete a claim decreased across the board in fiscal years 2014 and 2015, our analysis of VBA's data during this time period shows that Gulf War Illness claims completed in fiscal year 2015 still took 270 days to complete, on average, which is more than twice as long as VA's goal of 125 days from claim initiation to completion.

Approval Rates for Gulf War Illness Medical Issues Were Three Times Lower Than for Other Types of Medical Issues

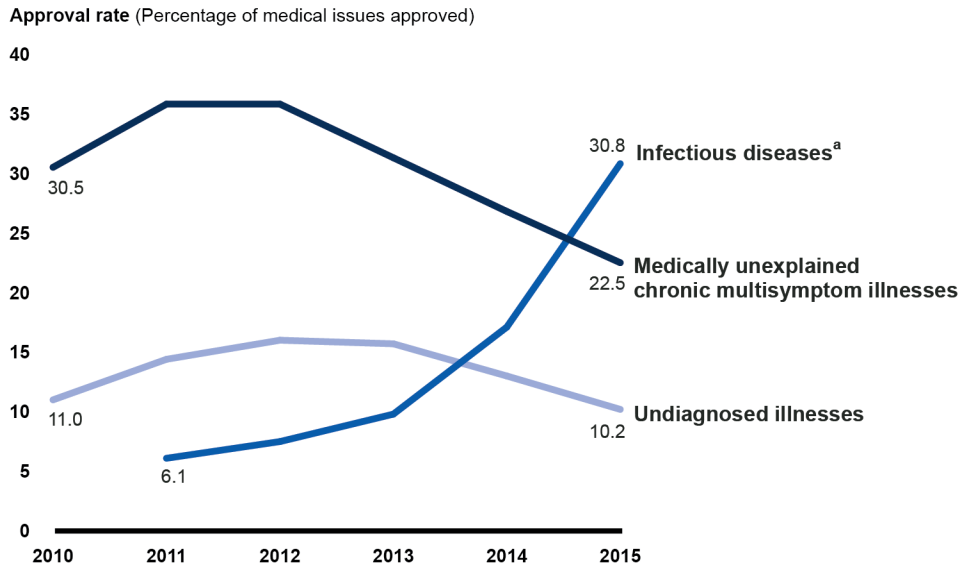
Our review of VBA data shows that during fiscal years 2010-2015 the approval rate for Gulf War Illness medical issues was 17 percent (about 18,000 of 102,000 issues rated), which was about 3 times lower than all other medical issues at 57 percent (about 14 million of 24.7 million issues rated).³³ This approval rate was consistently lower than that of the non-Gulf War Illness medical issues in each year we reviewed, which officials attributed, in part, to the complexity of processing Gulf War Illness-related medical issues.³⁴ Nonetheless, according to VBA officials, many of the veterans with denied Gulf War medical issues had other related medical issues approved, and, as a result, many veterans still received some disability compensation from VA.

Approval rates for Gulf War Illness medical issues varied by type of illness. From fiscal years 2010 through 2015, VBA's approval rate averaged approximately 13 percent for undiagnosed illness medical issues, 29 percent for medically unexplained chronic multisymptom illness medical issues (which may include fibromyalgia, chronic fatigue syndrome, and functional gastrointestinal disorders), and 14 percent for medical issues related to certain infectious diseases (which may include malaria, mycobacterium tuberculosis, and West Nile virus, among others). Approval rates for medically unexplained chronic multisymptom illness medical issues and undiagnosed illness medical issues decreased from fiscal year 2010 to fiscal year 2015, while approval rates for infectious disease medical issues increased during this period (see fig. 5).

³³To calculate approval rates for Gulf War Illness, we analyzed data at the medical issue level. We did so because a veteran can file a single claim with multiple medical issues and VA rates each medical issue separately.

³⁴VBA officials noted that it may be more useful to compare Gulf War Illness approval rates to those of other types of presumptive disability claims, such as those for presumptive illnesses VA associates with exposure to Agent Orange during the Vietnam War. However, the data provided to us by VBA did not allow us to conduct this analysis.

Figure 5: Approval Rates for Medical Issues Associated with Gulf War Illnesses per Year: Fiscal Years 2010-2015



Source: GAO analysis of U.S. Department of Veterans Affairs (VA) administrative data. | GAO-17-511

^aIn 2010, VA added nine infectious diseases as presumptive conditions associated with service in the Southwest Asia theater of operations or Afghanistan.

These Gulf War Illness medical issues may be denied at a higher rate, in part, because according to VA officials, Gulf War Illness is not always well understood by VA staff, and veterans sometimes do not have the medical records to adequately support their claims.

Accurate Processing of Gulf War Illness Claims Is Hampered by Confusion about the Gulf War General Medical Exam, and Claim Decision Letters Lack Key Information

VA Has Improved Some of Its Gulf War Illness Guidance, but Weaknesses Remain in Training on Conducting Gulf War General Medical Exams

Requesting a Gulf War General Medical Exam

The Gulf War general medical exam can be used to help determine a veteran's entitlement to VA disability benefits. According to VBA guidance, the Gulf War general medical exam must be requested when there is evidence of a chronic disease and qualifying service in Southwest Asia. For example, if a veteran's claim includes medical records that show the veteran has made complaints that fall under the undiagnosed illness or chronic multisymptom illness categories, a Gulf War general medical exam should be requested.³⁵ VBA has taken steps to clarify when its staff should request these examinations to support Gulf War Illness disability claim decisions. VBA provides guidance to its claims staff regarding when to request this medical exam; however, we found different interpretations of the guidance among staff in the four regional offices we visited. VBA officials acknowledged that the guidance on when

³⁵According to VBA guidance, if a claims rater determines the evidence provided by the veteran is adequate to substantiate the claim without a Gulf War general medical exam, the rater may decide not to request one.

to order a Gulf War general medical exam was complicated and said that each claim is unique and staff are expected to use their professional judgment on when to request exams. Confusion regarding the guidance for VBA staff on the exam process was further revealed through two VBA Special Focus Reviews on Gulf War Illness claim denials conducted in 2015 and 2016.³⁶ These reviews found incorrect claim decisions related to the medical exam process, including VBA claims' staff failing to obtain medical exams when they were necessary to properly evaluate a veteran's claim.³⁷

In response, VBA implemented training for its staff nationwide, which among other things covered when to request a Gulf War general medical exam.³⁸ In addition, a VBA official said they will administer a consistency study to claims processing staff in the 3rd quarter of fiscal year 2017 that will focus on when to request a Gulf War general medical examination.³⁹ This consistency study should provide VBA with additional information about the effectiveness of its training for claims rating staff and identify any areas for additional improvement.

Conducting and Reporting on the Gulf War Medical Exam

In addition, several VHA medical examiners we interviewed said that they can face challenges responding to the VBA's guidance that accompanies the Gulf War general medical exam request. VBA's *Notice to Examiners* asks medical examiners to evaluate a veteran's symptoms and determine if the symptoms are due to an undiagnosed illness or a medically unexplained chronic multisymptom illness or related to a known diagnosis or illness. Several VHA medical examiners told us it can be challenging to determine whether veterans' symptoms are undiagnosed illnesses and

³⁶VBA occasionally conducts Special Focus Reviews of certain topics of special interest to VBA or other stakeholders where accuracy and consistency are a concern.

³⁷VBA's Special Focus Reviews for Gulf War Illness denials did not find large error rates for Gulf War Illness claim decisions relative to their overall accuracy goal for all claim decisions. However, given the large number of potentially underreported Gulf War Illness-related medically unexplained chronic multisymptom illness medical issues we identified, it is not possible to know the full extent of the errors based solely on the results of these Special Focus Reviews. This is because the sample for the Special Focus Review was drawn only from the known population of medically unexplained chronic multisymptom illness medical issues. Those medical issues that were not flagged as Gulf War Illness by VBA's claim raters were not included in VA's sample.

³⁸At the beginning of February 2017, 98 percent of VBA's rating staff had completed this training.

³⁹VBA periodically conducts targeted reviews, called "consistency studies," to assess and test staff accuracy and consistency in processing specific types of claims.

medically unexplained chronic multisymptom illnesses, which would put them in category (1) or (2) and would presume they are related to service in the Southwest Asia theater of operations.⁴⁰ Medical examiners have different views on and approaches for how to assess veterans for undiagnosed illnesses, in part, because of the challenge of identifying something as an undiagnosed or unexplainable illness. For example, two examiners said that to determine that a veteran should be categorized as having an undiagnosed illness, they would have to rule out all known diseases that could cause the veterans symptoms. Doing so, however, is beyond the scope of a medical exam for disability compensation purposes. The purpose for such an exam is to provide VBA with the medical information it needs to decide a disability claim, rather than to diagnose and treat illnesses. Medical examiners at one clinic told us that they could nearly always attribute a veteran's symptoms to a diagnosable illness, which would mean the veteran does not qualify for benefits under the undiagnosed illness presumptive category. According to our analysis of VBA data, in fiscal year 2015, eight VBA regional offices had approval rates of 5 percent or less for undiagnosed illness medical issues. For additional data on regional office approval rates, see appendix II.

According to several VBA claim rating staff we interviewed, VHA medical examiners sometimes provide a medical opinion related to service connection when one is not necessary because the veteran has a presumptive condition, which fall into categories (1) and (2) and are considered Gulf War illnesses. This opinion may include language that indicates the veteran's presumptive condition may not be related to their service. If VBA claim raters do not recognize that the medical examiner has provided an unnecessary medical opinion about service connection for a presumptive condition, they may inadvertently deny a claim that should be presumptively granted. In our claim file review, we found two cases where the VHA medical examiner provided a medical opinion related to service connection for presumptive conditions.⁴¹

VHA developed specific training for medical examiners who may conduct these exams, and since June 2015, VHA has offered this optional 90-

⁴⁰When a medical examiner determines that a veteran's symptoms fall into category (1) or (2), no medical opinion is necessary to show these are service connected because these claims will be determined on a presumptive basis.

⁴¹We reviewed a non-generalizable random sample of 44 Gulf War Illness files for claims VBA completed in fiscal year 2015. These files are not necessarily representative of the entire population of Gulf War Illness claims.

minute web-based training course.⁴² We found this course on Gulf War Illness exams covers topics some medical examiners said were challenging. For example, the training course covers when a medical opinion from VHA on potential service connection is not needed to support these claims. However, only a few of the medical examiners we spoke with recalled having completed this training. At the same time, several VA staff noted the complexity of Gulf War Illness claims and some medical examiners stated they would benefit from additional training on Gulf War Illness and how to conduct these exams.

According to a VHA official, as of February 2017, VHA's training data shows that only about 10 percent of its medical examiners had completed this optional Gulf War Illness course. According to a VHA official, the low participation rate may be due to high workloads and the limited amount of time medical examiners are allowed for elective training. VHA medical examiners must complete several mandatory training courses when they are first hired, before they are permitted to perform medical exams.⁴³ In addition, they must complete training courses before performing certain specialty medical exams, such as for traumatic brain injury or post-traumatic stress disorder. VHA's *Directive on Training and Certification of Clinicians Performing VA Disability Examinations* states that training is critical to ensure clinicians who conduct medical examinations: (1) understand that disability examination reports have legal ramifications and (2) understand what VBA needs to know to make a valid determination on disability claims. In addition, federal internal control standards state that carrying out assigned responsibilities requires knowledge, skills, and abilities, which are gained through training, among other things.⁴⁴ Without training, medical examiners may not be able to reliably and consistently carry out their responsibilities with regard to conducting and reporting on Gulf War general medical exams and provide adequate information for decision-making to VBA's claim rating staff.

⁴²According to VHA, this course is not mandatory because it is not a requirement to become a certified medical examiner. However, officials said that local VHA clinic chiefs can assign this course to medical examiners at their local clinic as a prerequisite for performing Gulf War general medical exams if they choose.

⁴³According to a VHA official, its medical examiners must take regular continuing education courses to maintain their medical licensure and certification. VHA may offer various educational opportunities, including webinars, throughout the course of the year.

⁴⁴Demonstrating a commitment to competence is a principle of federal internal control standards. See GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sep. 10, 2014), principles 4.02 and 4.05.

Decision Letters to Veterans Regarding Their Gulf War Illness Claims Do Not Always Include Important Information

VBA guidance on preparing decisions on disability compensation claims instructs staff to explain all methods of service connection considered when denying a claim. If VBA determines that a veteran's Gulf War Illness claim does not meet the requirements for either a direct or presumptive service connection, a letter is sent to the veteran stating that the claim was denied. However, VBA's decision letter denying benefits for Gulf War Illness claims does not separately explain each method of service connection that was considered. Rather, these letters simply include more general language about service connection and explain that VA was not able to link the veteran's medical condition to their military service.

This may make it appear as if VBA is denying the claim without considering it for service connection under a presumptive method. For example, in one Gulf War Illness claim file we reviewed, nowhere in the decision letter does VBA explain that the claim for sleep disorder—one of the symptoms of undiagnosed illness and medically unexplained chronic multisymptom illness—due to Gulf War Illness was evaluated for service connection under both a direct and a presumptive method. See excerpt from one denial letter we reviewed, below (emphasis added):

“Service connection for sleep disorder is denied since this condition neither occurred in nor was caused by service.

*Service connection may be granted for any disease or injury that is considered to have resulted in a period of war or service. To establish direct service connection for a claimed disorder, objective evidence must show a diagnosis of a current disability that is related to a disease or injury incurred in or aggravated during "active" service; or that manifested itself to a compensable degree within one year from the date of discharge. **The evidence does not show an event, disease or injury in service.** Your service treatment records do not contain complaints, treatment, or diagnosis for this condition. The evidence does not show a current diagnosed disability. We received your medical evidence which discusses the symptoms of your medical condition. **We did not find a link between your medical condition and military service.**”*

Source: GAO review of Gulf War Illness claim file provided by the Veterans Benefits Administration. | GAO-17-511

The language in the above letter could lead the veteran to conclude that their claim was denied because VBA was unable to establish a link between their medical condition and their service in the Gulf War and that VBA had not considered it under the presumptive method of service

connection.⁴⁵ Without also including clear language in the decision letter about VBA's inability to grant service connection for their claim under the presumptive method, veterans may be uncertain that this was the case and may be unable to make a fully informed decision on whether to appeal VBA's decision.⁴⁶ VBA regulations state that claimants are entitled to notice of a VA decision that affects their benefits, including a clear statement of the reason, or reasons, for the decision.⁴⁷ VA is currently reviewing its decision letters as part of a broader review of the appeals process, and it has noted that veterans need a clear and detailed notice when a claim is decided. However, this effort does not include a review of the decision letters for Gulf War Illness claims. In its draft framework for the appeals process, VA identifies eight elements of an adequate notice to veterans.⁴⁸ These elements include language in plain English that informs the veteran of VA's findings including an explanation of how the evidence was considered.

⁴⁵As we noted in a prior report, according to VBA, unclear decision letters can confuse claimants. See GAO, *Veterans Benefits Administration: Clarity of Letters to Claimants Needs to Be Improved*, [GAO-02-395](#) (Washington D.C.: Apr. 23, 2002).

⁴⁶A veteran dissatisfied with VBA's initial claim decision can generally appeal within 1 year from the date of VBA's decision letter to the veteran. A veteran may appeal at VA—first to VBA, then to the Board of Veterans' Appeals. If the veteran is unsatisfied with the Board of Veterans' Appeals' final decision, the veteran can appeal to federal court. According to the Board of Veterans' Appeals, veterans appeal most often because they believe VBA: (1) incorrectly denied them disability compensation, or (2) did not award them enough disability compensation.

⁴⁷38 C.F.R. § 3.103(b).

⁴⁸VA, *A New Framework for Veterans Claims and Appeals* (Apr. 22, 2016). According to VA, it does not plan to produce a final version.

VA Considers Research When Identifying Additional Disabilities Related to Gulf War Service, but It Lacks a Plan to Guide Its Work on Key Research Goal

VA Has Used Research to Establish Presumptive Medical Conditions for Gulf War Veterans

VA's research on Gulf War Illness is used in several ways including identifying symptoms, diagnosing those with illnesses, developing treatment, and finding methods to respond to similar illnesses that may arise among veterans in the future. Some of this research is directly relevant to the disability compensation program; for example, it has been used to establish additional presumptive conditions.⁴⁹ To determine if new presumptive conditions should be established, VA contracts with the National Academy of Medicine, which forms a committee, to review all Gulf War Illness-related medical and scientific information.⁵⁰ For each topic VA would like to study, it gives to a committee of the National Academy of Medicine a specific topic and the committee reviews current, related peer-reviewed research and hears from relevant experts and stakeholders in public meetings.⁵¹ The committee writes a report to the VA Secretary that may include recommendations, such as adding potential illnesses to the list of presumptive conditions, or suggested

⁴⁹As we previously noted, VA presumes that certain disabilities diagnosed in some veterans were incurred or aggravated by their military service. If a veteran is found to have one of these presumptive conditions, VA presumes that the condition is connected to the veteran's service, and disability compensation can be awarded if all other requirements are met.

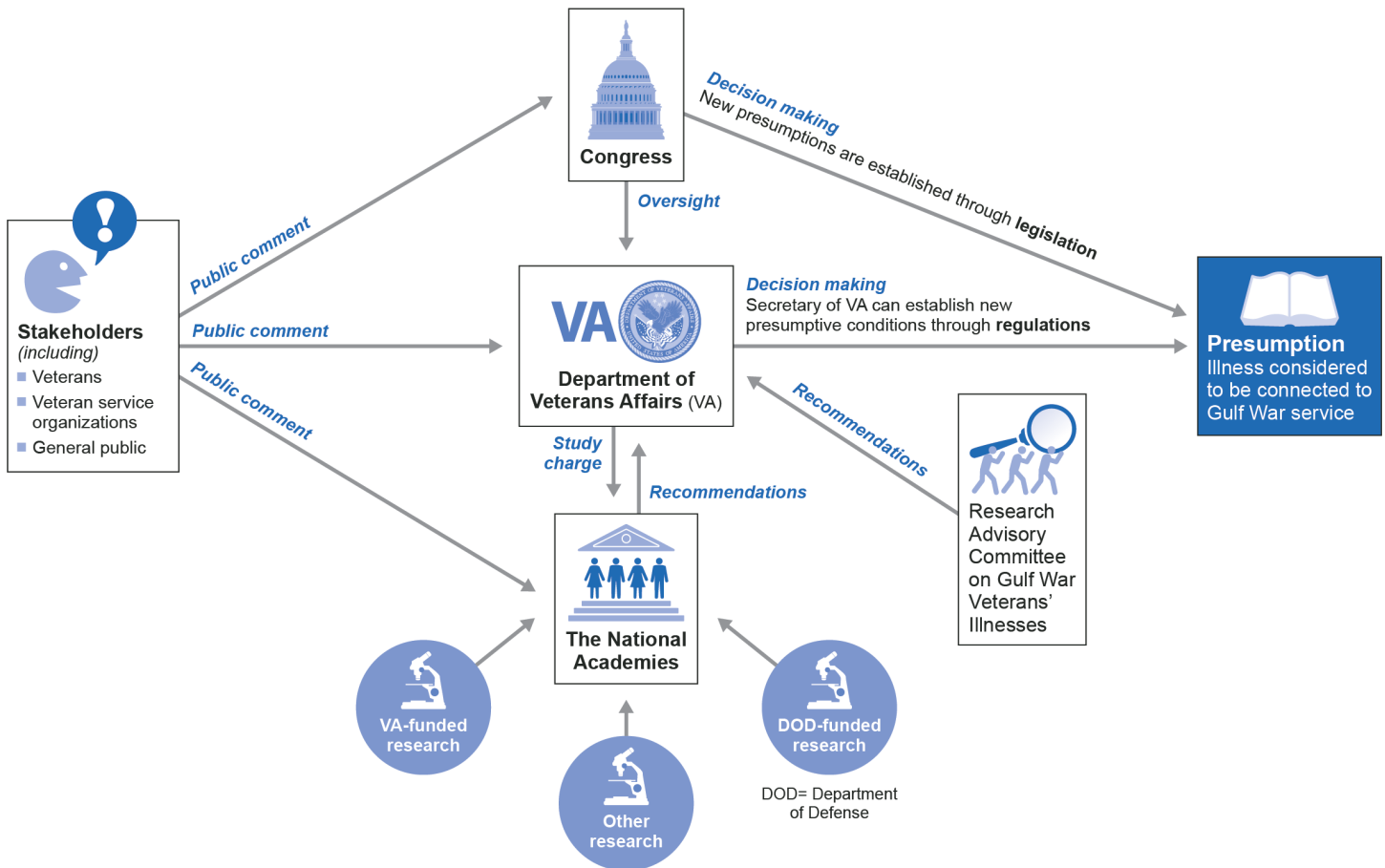
⁵⁰The Institute of Medicine recently changed its name to the National Academy of Medicine. In this report, we refer to the National Academy of Medicine when citing reports published by the former Institute of Medicine.

⁵¹According to the study director for the National Academy of Medicine's Gulf War and Health series, the National Academy of Medicine committees primarily use PubMed, a database of indexed citations and abstracts to medical sciences journal articles administered by the National Institutes of Health. Any research literature found in PubMed on the specific topic is examined. The study director said that the committee also reviews some relevant non-published research, but considers this a secondary source because it has not yet been peer-reviewed.

areas for future Gulf War Illness research. Officials from VA's Office of Research and Development and Post-Deployment Health review and consider recommendations from the committee when determining if research evidence warrants an expansion of the list of symptoms or illnesses that are considered presumptively connected to Gulf War service (see fig. 6). VA then adds new presumptive illnesses or other medical issues that VA will provide disability compensation for through regulations, and such illnesses can also be added through legislation.⁵²

⁵²Some presumptive conditions have been added through legislation. As we previously noted, in 1994 a presumptive service connection for "undiagnosed illness" for Gulf War veterans was established, and in 2001 legislation was enacted establishing "medically unexplained chronic multisymptom illnesses" as being presumptively service connected for these veterans.

Figure 6: Decision-Making Process for Establishing Presumptive Conditions



Source: GAO analysis of agency documents and information from VA officials. | GAO-17-511

One recent example of using evidence-based research occurred in 2010 when VA amended its regulation to establish nine infectious diseases as additional conditions presumed to be connected to Gulf War service. VA officials told us the agency did so as a result of evidence presented in a 2006 National Academy of Medicine Gulf War and Health report on the relationship between Gulf War service and the manifestation of certain infectious diseases.⁵³ VA follows a similar internal review process when it considers recommendations or suggested presumptive conditions

⁵³See National Academies of Sciences, Engineering, and Medicine, *Gulf War and Health: Volume 5. Infectious Diseases* (Washington, D.C.: The National Academies Press, 2006).

brought to it from other stakeholders, such as veterans advocacy groups or the Research Advisory Committee on Gulf War Veterans' Illnesses.

VA has not identified any new presumptive conditions that it associates with Gulf War service since adding the nine infectious diseases in 2010, but agency officials say they continue to review research, analyze National Academy of Medicine report findings and recommendations, and work with stakeholders to identify whether additional illnesses should be added. For example, according to VA officials, a stakeholder group recently worked with VA leadership to consider adding brain cancer to the list of presumptive conditions associated with service in the Gulf War. After further consideration, VA officials said the agency decided not to proceed, citing limited scientific evidence from a 2016 National Academy of Medicine report.⁵⁴ To inform the potential inclusion of brain cancer on the list of presumptive conditions in the future, VA officials told us that the agency will ask the upcoming National Academy of Medicine committee to include in its next review more recent research, including VA research, that has been completed since the National Academy of Medicine's prior study on brain cancer incidence in Gulf War veterans.⁵⁵

Lack of a Plan to Establish a Single Case Definition of Gulf War Illness Hinders VA's Progress toward Achieving This Goal

VA's progress toward its goal of establishing a single case definition of Gulf War Illness is hindered by the lack of a plan to undertake this work. As noted earlier, to help inform its Gulf War Illness research activities, VA relies on input from two key advisory groups—the National Academy of Medicine and VA's Research Advisory Committee on Gulf War Veterans' Illnesses. In 2014, these groups each recommended that VA take steps to establish a single case definition of Gulf War Illness that can be uniformly used to describe symptoms related to Gulf War service. According to the Centers for Disease Control and Prevention, a case definition is a set of uniform criteria used to define a disease for public health surveillance. VA's advisory groups emphasized the importance of a single case definition to improve the research, clinical diagnosis, and

⁵⁴See National Academies of Sciences, Engineering, and Medicine, *Gulf War and Health: Volume 10: Update of Health Effects of Serving in the Gulf War*, 2016. This report found insufficient scientific evidence to determine whether deployed Gulf War veterans were at increased risk of having any type of cancer, including brain cancer.

⁵⁵In 2004, we found several limitations of federally funded research projects related to cancer incidence among Gulf War veterans, including that some of this research did not study enough Gulf War veterans to reliably assess cancer incidence. Research may also have been impeded by incomplete federal data on the health characteristics of Gulf War veterans. See [GAO-04-767](#).

treatment of Gulf War Illness in veterans.⁵⁶ In the past, researchers have used multiple definitions to characterize symptoms in Gulf War veterans, and VA currently uses two different definitions of Gulf War Illness for its research.⁵⁷ According to VA, this has limited the extent to which researchers can compare findings between studies and identify similar characteristics of the illness.

Both the National Academy of Medicine and VA's Research Advisory Committee on Gulf War Veterans' Illnesses noted that a single case definition would help advance Gulf War Illness research activities by ensuring they are more focused and their results more usable. To make progress toward this goal, both groups recommended VA analyze data from its existing datasets in the near-term to better understand how they can be used to contribute to a case definition while also conducting future research projects that contribute to this goal in the long term.⁵⁸

Specifically, VA has access to dozens of existing large-population datasets from federally sponsored research studies, as well as data contained in several federal Gulf War registries that include veterans' health information. According to VA, if these data were merged with its administrative datasets, the information could be leveraged by VA researchers to improve understanding of Gulf War Illness and, ultimately, contribute to the development of a single case definition. These datasets could provide researchers with additional information needed to develop a case definition, including information on veterans' service and onset of their symptoms. VA's research advisory groups also noted the long-term need for VA to plan for future research that is likely to contribute to a single case definition. In its Gulf War Research Strategic Plan, VA noted that future research might include the application of new scientific

⁵⁶The National Academy of Medicine and VA's Research Advisory Committee on Gulf War Veterans' Illnesses both recognize that establishing a single case definition has been challenging and noted the risks of adopting one that is either too narrow or too broad. Nevertheless, they both identified steps VA can take toward this goal.

⁵⁷VA has historically relied on researchers to define the illness themselves and in 2015 counted at least 10 different definitions used by researchers to characterize symptoms in Gulf War veterans. VA currently uses two case definitions of Gulf War Illness for research purposes—one from the Centers for Disease Control and Prevention and one from research conducted by the Kansas Persian Gulf War Veterans Health Initiative.

⁵⁸See National Academies of Sciences, Engineering, and Medicine, *Chronic Multisymptom Illness in Gulf War Veterans: Case Definitions Reexamined* (Washington, D.C.: The National Academies Press, 2014) and Research Advisory Committee on Gulf War Veterans' Illnesses, *Gulf War Illness and the Health of Gulf War Veterans: Research Update and Recommendations, 2009 – 2013* (Washington, D.C.: U.S. Government Printing Office, 2014).

capabilities, such as biomarker identification and genome-wide association studies that could not only significantly advance understanding of an individual's genetic pre-disposition toward developing symptoms of Gulf War Illness, but also help to inform the establishment of a single case definition.

In response to recommendations from its advisory groups to establish a single case definition of Gulf War Illness, VA included this as a strategic objective in its 2015 update to the Gulf War Research Strategic Plan. However, according to a VA official, the agency has not developed a plan to guide its review of existing medical datasets or integrate information from recent and ongoing research to identify areas of future research and establish a single case definition. Federal internal control standards call for agencies to have documented plans that include specific action steps associated with their objectives.⁵⁹ VHA officials told us that they are considering how to use existing federal datasets and ongoing research to better understand Gulf War Illness but have not laid out specific actions, such as what data to use and how using these data would contribute to the development of a single case definition. VA officials attributed the lack of a specific plan to challenges with developing a single case definition and noted that it must be a slow and deliberate process. However, without a plan, VA risks engaging in research activities that are not cohesively targeted toward its goal. Planning for additional research to establish a single case definition could lead to improvements in the diagnosis and treatment of veterans with Gulf War Illness.

Conclusions

Nearly 30 years after the Gulf War conflicts began, hundreds of thousands of veterans continue to experience chronic medical conditions that may be related to a host of hazardous exposures they faced while serving our country in Southwest Asia and Afghanistan. Since VA first began to provide disability compensation to veterans suffering from Gulf War Illness in 1995, the agency has improved aspects of its guidance and training to help its staff accurately and consistently process Gulf War Illness claims. Nevertheless, VHA's medical examiners have expressed confusion about how to conduct and report on the Gulf War general

⁵⁹According to federal internal control standards, an agency's objectives should be defined in specific terms, including clearly defining how the objective is to be achieved and who is responsible for achieving the objective, as well as establishing time frames for meeting the agency's goal. These measures allow agencies to track progress toward achieving their goals. See [GAO-14-704G](#), principle 6.03 and 6.04.

medical exam. By not requiring training on Gulf War Illness for its examiners, VA runs the risk of inconsistently and inaccurately making benefit decisions.

When VBA denies a veteran's Gulf War Illness claim, it is important that the reason(s) be completely and clearly explained. Particularly for complex claims such as Gulf War Illness, which can be evaluated through both a presumptive and direct service connection, veterans should be able to understand what VBA decided and why. Decision letters that lack important information about how a claim was evaluated and decided may lead the veteran to conclude that VBA had not considered their claim under the presumptive method of service connection.

Finally, the persistent lack of a single case definition for Gulf War Illness contributes to many of the current challenges with the Gulf War Illness disability compensation program. VA has made significant progress on Gulf War research in the past 27 years, but much work remains to be done. Without a documented plan to establish a single case definition, VA may miss opportunities to focus its efforts and advance knowledge about Gulf War Illness, and potentially improve the lives of hundreds of thousands of affected veterans.

Recommendations for Executive Action

To help ensure VHA medical examiners are prepared to conduct the Gulf War general medical exam, we recommend that the Secretary of Veterans Affairs direct the Under Secretary for Health to require medical examiners to complete training, such as the 90-minute Gulf War Illness web-based course, before conducting these exams.

To provide more complete information to veterans whose Gulf War Illness claims are denied, we recommend that the Secretary of Veterans Affairs direct the Under Secretary for Benefits to update guidance to require that decision letters indicate whether Gulf War Illness medical issues were evaluated under both a presumptive and direct service connection method.

To increase the likelihood of making progress toward developing a single case definition of Gulf War Illness, we recommend that the Secretary of Veterans Affairs direct the Under Secretary for Health to prepare and document a plan to develop a single case definition of Gulf War Illness. This plan should include near- and long-term specific actions, such as analyzing and leveraging information in existing datasets and identifying any areas for future research to help VA achieve this goal.

Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Veterans Affairs for review and comment. Their comments are reproduced in appendix III. VA agreed with all of our recommendations and stated it has plans in place to address them. Regarding training on Gulf War Illness for its medical examiners, VA said it plans to make its 90-minute web-based training course mandatory for its medical examiners who conduct Gulf War Illness exams. VA also stated it will improve how it communicates decisions to veterans and is in the process of updating its guidance to the regional offices to clarify the language required for its Gulf War Illness decision letters. Finally, VA said it will convene a group of subject matter experts to work on a plan—as described in our report—to establish a single case definition of Gulf War Illness.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Secretary of Veterans Affairs, the Under Secretary for Health, and the Under Secretary for Benefits. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (617) 788-0534 or emreyarrasm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Melissa Emrey-Arras

Melissa Emrey-Arras
Director, Education, Workforce, and Income Security

Appendix I: Objectives, Scope, and Methodology

The objectives of this report were to examine (1) the trends in Gulf War Illness disability claims in recent years, (2) challenges associated with accurately processing and clearly communicating decisions on Gulf War Illness disability claims, and (3) how the Department of Veterans Affairs (VA) uses research on Gulf War Illness to inform its disability compensation program. To address all three objectives, we reviewed relevant federal laws and regulations as well as VA policies, procedures, guidance, training materials, and VA documents describing its Gulf War Illness research program. We also reviewed federal standards for internal controls. Further, for all three objectives, we interviewed Veterans Benefits Administration (VBA) and Veterans Health Administration (VHA) officials, regional staff, and several veterans' advocacy organizations.

We conducted this performance audit from October 2015 to June 2017 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.

Analysis of VA Data on Gulf War Illness Trends

To examine recent trends in Gulf War Illness disability claims, we obtained and analyzed administrative data from VBA's Veterans Service Network Corporate Database for claims completed in fiscal years 2010 through 2015 (the most recent data available at the time of our review).¹ The data contained information on veterans' service that included dates of service, branch of service, medical issues the veteran had ratings for, and whether the veteran served in the Southwest Asia theater of operations during the Persian Gulf War. It also contained information on rating decisions (approvals and denials) and award information for all disability claims, including Gulf War Illness claims.² The Gulf War Illness claim trends we present are of veterans who were deployed to Southwest Asia since August 2, 1990, because service in the Southwest Asia theater

¹Because we used the claim completion date to identify claims for our review, some claims in our analysis population may have been initiated prior to fiscal year 2010. We included in our review both original and reopened disability compensation claims.

²According to VBA officials, the corporate database contains claim and award data but no narrative information about the underlying claim decision that VBA's claim rating staff enters into the system. We determined that it was not feasible to include a detailed analysis of narrative information on ratings for this review, and instead we conducted a high-level trend analysis of the available quantitative data.

of operations (or Afghanistan, in the case of certain infectious diseases) is required to be granted these benefits presumptively.³

We requested data on claims completed in fiscal years 2010 through 2015 because in 2010 VBA established specific codes in its database to track medical issues for Gulf War Illness disability claims. To identify Gulf War Illness claims in the data, VBA created three separate indicator fields in the dataset provided to us, one for each of the three types of presumptive Gulf War illnesses (undiagnosed illnesses, chronic multisymptom illnesses, and infectious diseases). To verify that VBA's Gulf War Illness indicator fields were complete per VBA's definition, we performed a reliability check by comparing the diagnostic codes associated with each rating decision to the Gulf War indicator VBA provided. Unless otherwise noted, we relied on VBA's Gulf War Illness indicator fields to conduct our analysis of Gulf War Illness claim trends.

We assessed the reliability of the data we used in our analysis by (1) performing electronic testing for obvious errors in accuracy and completeness, (2) reviewing existing information about the data and the system that produced them, and (3) interviewing agency officials knowledgeable about the data. We determined that the data were sufficiently reliable for purposes of providing information on trends found in Gulf War Illness claims. However, there were limitations to the data we obtained. Specifically:

- The data may under-represent the number of Gulf War veterans who were deployed to Southwest Asia. VBA officials stated that these data may not include some Gulf War veterans who were deployed to the region after June 2008 because, according to VBA officials, the agency does not always verify military service records on deployment locations. According to VBA officials, the most reliable source of deployment data is from the Department of Defense. To identify veterans who served in the Gulf War conflicts, VBA used a Department of Defense personnel file containing deployment information. According to VBA officials, VA last received a copy of this file in June 2008, and they do not consider the information on veterans' service locations to be complete after this date.

³ In a small number of instances, these data may include veterans who served in Afghanistan and are eligible for disability compensation for certain infectious diseases that VA presumes to be related to their service.

- The data on the medically unexplained chronic multisymptom illness medical issues may have been underreported due to inconsistent data entry over time by VBA's claim rating staff. According to VBA officials, the three primary chronic multisymptom illnesses (chronic fatigue syndrome, fibromyalgia, and functional gastrointestinal disorders) can be disabilities claimed by any veteran regardless of when and where they served. We counted the number of medical issues without a VA Gulf War Illness flag for the three diagnostic codes for chronic multisymptom illnesses from eligible Gulf War veterans to determine the number of possible under-reported Gulf War Illness-related claims for medically unexplained chronic multisymptom illness.
- We did not evaluate if service connection was properly considered in the Gulf War Illness claims we analyzed. According to VBA, it is impossible to determine from the data alone if service connection was properly considered under relevant federal laws and regulations because there are a limited number of denial options in its database.⁴

Review of Gulf War Illness Claims Processing

To understand challenges associated with accurately processing and clearly communicating decisions on Gulf War Illness disability claims, we reviewed relevant federal laws, regulations, and VBA's procedures manual. We also reviewed two internal assessments conducted by VBA of the accuracy of a random sample of denied Gulf War Illness claims, as well as a review of claims processing staff's responses to standardized questionnaires on developing and rating claims involving disabilities associated with Gulf War service. We assessed the reliability of these documents by interviewing agency officials knowledgeable about how they were produced and determined that they were sufficiently reliable for the purposes of our reporting objectives. We conducted interviews with VBA and VHA headquarters officials and officials at four regional offices (selected based on high numbers of Gulf War Illness claims completed in fiscal year 2015 and to obtain geographic dispersion).⁵ The four regional offices were Cleveland, Ohio; Seattle, Washington; St. Petersburg,

⁴A VA Special Focus Review of Gulf War Illness claims completed in fiscal year 2015 noted that it was not possible to determine from the aggregate data if the Gulf War Illness claim decision was accurate because there are limited denial options for its claim rating staff to select in the database. Instead, VBA noted that one needed to look at the underlying narrative decision prepared by the claim rater to determine the accuracy of the decision.

⁵We used data requested from VBA on the number of undiagnosed illness and medically unexplained chronic multisymptom illness claims completed by each regional office in fiscal year 2015.

Florida; and Waco, Texas. These offices were in the top quarter of VBA's regional offices in terms of the number of undiagnosed illness and medically unexplained chronic multisymptom illness claims completed in fiscal year 2015. Two of these offices had approval rates above the median approval rate and the other offices' approval rates were below the median. We also interviewed officials at four VHA compensation and pension examination clinics associated with these regional offices.⁶

During our VBA site visits, we interviewed VBA claims processing and quality review staff, management, and local veterans service organization officials. We discussed VBA's procedures for processing Gulf War Illness claims, including requests for Gulf War general medical exams and challenges related to that process. At the VHA clinics, we interviewed VHA medical examiners, supervisors, and administrative staff. Where available, we also interviewed VBA staff assigned as liaisons to the VHA clinic to troubleshoot issues related to compensation and pension examinations. With these staff, we discussed the medical exam process for Gulf War Illness claims and related challenges. We obtained and reviewed regional office documents related to Gulf War Illness claim processing, including locally developed training and guidance designed to assist VBA staff responsible for processing Gulf War Illness claims. In addition, we reviewed a sample of 44 Gulf War Illness files for claims completed in fiscal year 2015 to provide illustrative examples of how VA evaluates claims for Gulf War Illness and communicates its decisions to veterans.⁷ For each file, we reviewed the veteran's application for disability benefits, the VA Gulf War general medical exam request and report, the VBA rating decision and coding sheet, and the decision letters sent to the veteran by VBA. The interviews we conducted and the claim files we reviewed are non-generalizable, though they provided illustrative examples of the challenges VA staff face when processing Gulf War Illness claims.

⁶The four VHA compensation and pension clinics we visited were located in Parma, Ohio; Temple, Texas; Tacoma, Washington; and St. Petersburg, Florida.

⁷We randomly selected 45 claim files across the four regional offices that were completed in fiscal year 2015 and included either an undiagnosed illness or a chronic multisymptom illness medical issue, or both. We excluded one file from our review because it was miscoded as a Gulf War Illness claim.

Role of Research in Understanding Gulf War Illness

To assess how VA uses research on Gulf War Illness to inform its disability compensation program, we reviewed reports and recommendations from the National Academy of Medicine (formerly the Institute of Medicine) and VA's Research Advisory Committee on Gulf War Veterans' Illnesses about Gulf War Illness research, as well as internal tracking documents used by VA to follow the implementation status of related recommendations. We also reviewed strategic planning documents for VA's Gulf War Illness Research Program. In addition, we reviewed reports from VA's prior internal Gulf War Illness task forces and workgroups and interviewed officials about the impetus for and outcomes of these efforts. We interviewed officials from the VA Office of Policy and Planning and from VHA's Offices of Research and Development and Post-Deployment Health to discuss past and future Gulf War Illness research priorities and how research findings inform the disability compensation program. We also interviewed current and former members of the Research Advisory Committee on Gulf War Veterans' Illnesses, the study director for the Gulf War and Health series at the National Academy of Medicine's Health and Medicine Division, and the officials responsible for Gulf War Illness research at the Department of Defense's Congressionally Directed Medical Research Programs. Our interviews with these individuals focused on the current state of Gulf War Illness research and VA's process for planning and conducting Gulf War Illness research.

Appendix II: Approval Rates for Gulf War Illness Medical Issues Completed in Fiscal Year 2015 by Veterans Benefits Administration Regional Office

The following table includes our analysis of Veterans Benefits Administration (VBA) administrative data on all 58 regional offices' approval rates for medically unexplained chronic multisymptom illness and undiagnosed illness medical issues completed by VBA in fiscal year 2015.

Table 1: Approval Rates by VBA Regional Office for Medically Unexplained Chronic Multisymptom Illness and Undiagnosed Illness Medical Issues Completed in Fiscal Year 2015

Regional Office	Medically Unexplained Chronic Multisymptom Illness			Undiagnosed Illness		
	Approved	Denied	Approval Rate	Approved	Denied	Approval Rate
Albuquerque, NM	24	92	20.7%	24	500	4.6%
Anchorage, AK	0	2	0.0%	0	8	0.0%
Atlanta, GA	39	262	13.0%	52	986	5.0%
Baltimore, MD	7	34	17.1%	40	105	27.6%
Boise, ID	14	33	29.8%	16	129	11.0%
Boston, MA	18	11	62.1%	35	36	49.3%
Buffalo, NY	5	6	45.5%	6	22	21.4%
Cheyenne, WY	4	37	9.8%	15	94	13.8%
Chicago, IL	8	37	17.8%	12	90	11.8%
Cleveland, OH	28	83	25.2%	34	384	8.1%
Columbia, SC	38	248	13.3%	70	774	8.3%
Denver, CO	40	61	39.6%	69	369	15.8%
Des Moines, IA	19	60	24.1%	15	197	7.1%
Detroit, MI	35	52	40.2%	24	180	11.8%
Fargo, ND	3	6	33.3%	3	37	7.5%
Fort Harrison, MT	8	55	12.7%	6	139	4.1%
Hartford, CT	24	71	25.3%	25	279	8.2%
Honolulu, HI	3	14	17.6%	18	109	14.2%
Houston, TX	28	115	19.6%	19	318	5.6%
Huntington, WV	69	139	33.2%	74	456	14.0%
Indianapolis, IN	34	82	29.3%	31	214	12.7%
Jackson, MS	9	53	14.5%	25	336	6.9%
Lincoln, NE	54	73	42.5%	53	306	14.8%
Little Rock, AR	45	140	24.3%	50	373	11.8%
Los Angeles, CA	18	34	34.6%	40	107	27.2%
Louisville, KY	43	148	22.5%	50	493	9.2%
Manchester, NH	8	17	32.0%	13	29	31.0%

**Appendix II: Approval Rates for Gulf War
Illness Medical Issues Completed in Fiscal
Year 2015 by Veterans Benefits Administration
Regional Office**

Regional Office	Medically Unexplained Chronic Multisymptom Illness			Undiagnosed Illness		
	Approved	Denied	Approval Rate	Approved	Denied	Approval Rate
Manila, PI	7	4	63.6%	6	27	18.2%
Milwaukee, WI	23	51	31.1%	30	133	18.4%
Montgomery, AL	39	160	19.6%	55	585	8.6%
Muskogee, OK	69	283	19.6%	70	2009	3.4%
Nashville, TN	139	375	27.0%	154	1095	12.3%
New Orleans, LA	27	108	20.0%	37	385	8.8%
New York, NY	3	13	18.8%	4	34	10.5%
Newark, NJ	3	8	27.3%	2	21	8.7%
Oakland, CA	19	42	31.1%	30	102	22.7%
Philadelphia, PA	47	95	33.1%	55	247	18.2%
Phoenix, AZ	11	123	8.2%	24	337	6.6%
Pittsburgh, PA	10	87	10.3%	12	218	5.2%
Portland, OR	31	62	33.3%	23	379	5.7%
Providence, RI	16	33	32.7%	14	74	15.9%
Reno, NV	9	31	22.5%	16	56	22.2%
Roanoke, VA	47	544	8.0%	51	1482	3.3%
Salt Lake City, UT	19	61	23.8%	19	178	9.6%
San Diego, CA	46	183	20.1%	100	637	13.6%
San Juan, PR	12	55	17.9%	113	494	18.6%
Seattle, WA	76	113	40.2%	135	267	33.6%
Sioux Falls, SD	7	58	10.8%	11	176	5.9%
St. Louis, MO	12	53	18.5%	7	224	3.0%
St. Paul, MN	87	225	27.9%	82	541	13.2%
St. Petersburg, FL	44	179	19.7%	29	582	4.7%
Togus, ME	41	58	41.4%	126	189	40.0%
Waco, TX	47	231	16.9%	42	768	5.2%
Washington, DC	6	21	22.2%	20	65	23.5%
White River Junction, VT	9	10	47.4%	9	27	25.0%
Wichita, KS	14	58	19.4%	12	204	5.6%
Wilmington, DE	2	9	18.2%	3	30	9.1%
Winston-Salem, NC	35	146	19.3%	54	424	11.3%

Source: GAO analysis of U.S. Department of Veterans Affairs (VA) administrative data. | GAO-17-511

Appendix III: Comments from the Department of Veterans Affairs



DEPARTMENT OF VETERANS AFFAIRS
Washington DC 20420

June 14, 2017

Ms. Melissa Emery-Arras
Director
Education, Workforce, and
Income Security
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Emery-Arras:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office's (GAO) draft report, "**GULF WAR ILLNESS: Improvements Needed for VA to Better Understand, Process, and Communicate Decisions on Claims**" (GAO-17-511).

The enclosure provides our general comments and sets forth the actions to be taken to address the GAO draft report recommendations.

VA appreciates the opportunity to comment on your draft report.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gina S. Farrissee".

Gina S. Farrissee
Deputy Chief of Staff

Enclosure

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
**"GULF WAR ILLNESS: Improvements Needed for VA to Better Understand,
Process, and Communicate Decisions on Claims"**
(GAO-17-511)

General Comments:

Questions still exist regarding why certain Gulf War Veterans showed, and still show, medically unexplained symptoms while others did not, why symptoms are diverse in some and specific in others, and why combat exposure is not consistently linked to having or not having symptoms. One of the issues is that there is not a standardized case definition. To correct this, the Department of Veterans Affairs (VA) spent approximately two million dollars to fund a 2014 Institute of Medicine (IOM) Report - *Chronic Multisymptom Illness in Gulf War Veterans: Case Definitions Reexamined*. VA charged the IOM Committee to come up with a single case definition; but instead the Committee recommended two existing case definitions for Chronic Multisymptom Illness (CMI) (also called Gulf War Illness, note some experts also use the term Gulf War Illnesses because of the constellation of symptoms); that were case definitions primarily to be used for research. The IOM Committee's report stated: *Evidence is lacking in the studies reviewed to characterize most elements of a case definition (for example, onset, duration, severity, and laboratory findings) with certainty. Without that information, the committee could not develop a new definition for CMI.* VA's Research Advisory Committee on Gulf War Veterans' Illnesses (RACGWVI) has also recommended further research on case definitions on several occasions. The Office of Research and Development (ORD) followed this RACGWVI recommendation by contracting with the IOM as stated above. The RACGWVI has also recommended in 2013 that ORD and the Department of Defense's Office of Congressionally Directed Medical Research Programs work together to establish a case definition. This lack of a single definition was also noted in a 2015 update to the VA Gulf War Strategic Plan. The Government Accountability Office has now called on VA to further look at research and databases to derive a plan in order to formulate a single case definition.

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
***"GULF WAR ILLNESS: Improvements Needed for VA to Better Understand,
Process, and Communicate Decisions on Claims"***
(GAO-17-511)

Recommendation 1: To help ensure that VHA medical examiners are prepared to conduct the Gulf War general medical exam, GAO recommends that the Secretary of Veterans Affairs direct the Under Secretary for Health to require medical examiners to complete training before conducting these exams, such as the 90-minute Gulf War Illness web-based course.

VA Comment: Concur. This recommendation is related to VA GAO High Risk Area *Managing Risks and Improving VA Health Care*, GAO Area of Concern 4 (inadequate training for VA staff). The Veterans Health Administration's (VHA) Office of Disability and Medical Assessment (DMA) will ensure that all Compensation and Pension examiners that conduct Gulf War examinations will complete a mandatory 90-minute web-based course on Gulf War Illnesses. The status is in progress with a target completion date of November 2017.

Recommendation 2: To provide more complete information to veterans whose Gulf War illness claims are denied, GAO recommends that the Secretary of Veterans Affairs direct the Under Secretary for Benefits to update guidance to require that decision letters indicate whether Gulf War Illness medical issues were evaluated under both a presumptive and direct service connection method.

VA Comment: Concur. The Veterans Benefits Administration (VBA) will make necessary changes to improve the notification process and will provide updated manual guidance to the regional offices by the end of August 2017. The status is in progress with a target completion date of August 2017.

Recommendation 3: To increase the likelihood of making progress towards developing a single case definition of Gulf War Illness, GAO recommend that the Secretary of Veterans Affairs direct the Under Secretary for Health to prepare and document a plan to develop a single case definition of Gulf War Illness. This plan should include near- and long-term, specific actions, such as analyzing and leveraging information in existing datasets and identifying any areas for future research to help VA achieve this goal.

VA Comment: Concur. This recommendation is related to VA GAO High Risk Area *Managing Risks and Improving VA Health Care*, GAO Area of Concern 1 (ambiguous policies and inconsistent processes). To increase the likelihood of making progress towards developing a single case definition of Gulf War Illness, VHA's Office of Research and Development and Post-Deployment Health Services in the Office of Patient Care Services will convene a group of subject matter experts (SMEs) to develop a plan that addresses near and long-term actions related to Gulf War Illness, as described in this report. This group of SMEs will also coordinate these efforts with VHA's DMA, VBA, and other internal and external stakeholders. VA SMEs will interface in particular with the Department of Defense's Congressionally Directed Medical

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
***"GULF WAR ILLNESS: Improvements Needed for VA to Better Understand,
Process, and Communicate Decisions on Claims"***
(GAO-17-511)

Research Program that funds much of the current research on Gulf War Illness(es). Specific actions within the plan will include reviewing the current literature, analyzing and leveraging information in existing datasets, and identifying any areas for future research. The status is in progress with a target completion date of March 2018.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Melissa Emrey-Arras, (617) 788-0534 or emreyarrasm@gao.gov

Staff Acknowledgments

In addition to the contact named above, Nyree M. Ryder Tee (Assistant Director), Nora Boretti (Analyst-In-Charge), Daniel Bertoni, Kaitlan M. Doying, John Lack, and Martin E. Scire made significant contributions to this report. Also contributing to this report were James E. Bennett, Deborah K. Bland, Melinda L. Cordero, Brett S. Fallavollita, Alexander G. Galuten, Michael P. Hartnett, Lara L. Laufer, Marcia A. Mann, Jeffrey M. Mayhew, Sushil K. Sharma, Almeta J. Spencer, Walter K. Vance, and Kathleen L. van Gelder.

Related GAO Products

Waste Management: DOD Has Generally Addressed Legislative Requirements on the Use of Burn Pits but Needs to Fully Assess Health Effects. [GAO-16-781](#). Washington, D.C.: September 26, 2016.

Department of Veterans Affairs: Federal Gulf War Illnesses Research Strategy Needs Reassessment. [GAO-04-767](#). Washington, D.C.: June 1, 2004.

Gulf War Illnesses: DOD's Conclusions About U.S. Troops' Exposure Cannot Be Adequately Supported. [GAO-04-821T](#). Washington, D.C.: June 1, 2004.

Gulf War Illnesses: Federal Research Efforts Have Waned, and Research Findings Have Not Been Reassessed. [GAO-04-815T](#). Washington, D.C.: June 1, 2004.

Veterans Benefits Administration: Clarity of Letters to Claimants Needs to Be Improved. [GAO-02-395](#). Washington, D.C.: April 23, 2002.

Veterans' Benefits: Improvements Made to Persian Gulf Claims Processing. [GAO/T-HEHS-98-89](#). Washington, D.C.: February 5, 1998.

Gulf War Illnesses: Improved Monitoring of Clinical Progress and Reexamination of Research Emphasis Are Needed. [GAO/NSIAD-97-163](#). Washington, D.C.: June 23, 1997.

Veterans' Compensation: Evidence Considered in Persian Gulf War Undiagnosed Illness Claims. [GAO/HEHS-96-112](#). Washington, D.C.: May 28, 1996.

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