To serve in the United States military—the Army, Navy, Marine Corps, Air Force, or Coast Guard (when it is operating as a service within the Department of the Navy)—service members must meet certain medical and physical standards to perform duties appropriate to their office, grade, rank, or rating.

A medical evaluation may call into question a service member’s ability to meet medical retention standards to perform military duties, at which point the member enters the Disability Evaluation System (DES). Service members who do not meet medical retention standards progress to a physical disability evaluation, which results in a disposition decision.

Primarily while undergoing medical and physical disability evaluations, the service member receives counseling regarding what to expect throughout all phases of the disability evaluation process, the significance and consequences of the determinations that are made, and his or her rights, benefits, and entitlements. A member who disagrees with the physical disability evaluation findings and decision may redress that disagreement through appellate review.

Appropriate personnel authorities accomplish final disposition of the service member’s case by issuing orders and instructions to implement the determination of the respective military department’s final reviewing authority. The service member exits the DES by returning to duty, separating (with or without compensation), or retiring for disability or length of service.

Title 10 of the U.S. Code (U.S.C.) establishes the basis for disability retirement and separation. The DES is the Department of Defense (DoD) management tool used to determine the disposition of a service member who develops a physical or medical condition that calls into question the member’s ability to perform the duties of his or her office, grade, rank, or rating. The DoD assigns responsibility for developing policies to implement and manage the DES to three Assistant Secretaries of Defense—for Force Management, Reserve Affairs, and Health Affairs. All three Assistant Secretaries report to the Under Secretary of Defense for Personnel and Readiness.

Disability evaluation training was first recognized in 1992 as a significant factor affecting DES performance. At that time, a Department of Defense Inspector General audit determined that the DoD DES was not efficient or economical. The audit re-
ported that disability cases were not processed promptly and service members were incorrectly rated for their disabilities. The audit report noted, among other things, that military personnel who adjudicated disability cases were inadequately trained, resulting in inconsistent application of disability policy and the lack of formal training contributed to rating deficiencies. Several other reports likewise recommended that the Office of the Secretary of Defense (OSD) focus on training as a key intervention to improve the performance of the DES.

DoD disability policy documents also emphasize the role of training in achieving the DES goal of conducting physical disability evaluation in a consistent and timely manner. The policy documents assign responsibility for developing and maintaining (1) a program of instruction for the DES; (2) a program of instruction on the preparation of Medical Evaluation Boards1 for physical disability cases to be used by military treatment facilities (MTFs); and (3) a program of instruction on the medical aspects of physical disability adjudication, to include the application of the Veterans Administration Schedule for Rating Disabilities (VASRD) for use by PEB adjudicators and appellate review authorities.

STUDY COMMISSION

In 1999, the Principal Deputy Assistant Secretary of Defense for Force Management Policy asked RAND’s National Defense Research Institute to identify and recommend changes to the training provided to primary participants2 of the DES to ensure consistent application of disability policy across and within the services.

Consistent application of disability policy is one means of addressing unwarranted variability in differential treatment of similarly situated service members. However, underlying the desire to reduce variability is the more fundamental objective of enhancing the DES’s ability to accomplish its purpose and desired outcomes. As a result, the primary question addressed in this study became the following: How can changes to disability evaluation training and other management interventions improve DES performance?

This report addresses the following four specific research tasks for the Office of the Assistant Secretary of Defense for Force Management Policy that focus on improving the performance of the DES:

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1To avoid misunderstanding, we avoid using the acronym MEB, which is commonly used to mean three different things: the group of physicians who convene as a board, the narrative summary, and the complete disability case file. Instead, we use “Medical Evaluation Board” when referring to the group of physicians who convene as a board (including those who pass records among themselves without actually convening a board). We refer to the actual narrative summary as the “narrative summary” and the disability case file as the “medical board.”

2For the purposes of this study, primary participants in the DES include the following: physicians who refer service members to Medical Evaluation Boards, generally known as referring physicians; physicians who convene Medical Evaluation Boards; Medical Evaluation Board approving authorities; PEB Liaison Officers (PEBLOs); patient administrators who support Medical Evaluation Boards and/or PEBLOs; PEB administrative action officers; PEB members; PEB approving authorities; post-PEB appellate review board members; active component unit commanders; Reserve unit commanders who determine eligibility for temporary incapacitation pay; and attorneys who represent service members during appeals before the Formal Physical Evaluation Board.
• describe a basis for assessing the performance of the DES
• identify issues affecting the current performance of the DES and interventions to resolve those issues
• analyze DES training needs and recommend changes in training to improve system performance
• develop a method for continuously monitoring performance of the DES over time.

STUDY APPROACH

To recommend changes to the training provided to DES primary participants that would ensure consistent application of disability policy across and within the services, we first identified a number of instances of variability in policy application across and within the military departments. We captured, and then analyzed, those instances of variability in the form of issues. We next employed an issues-driven, bottom-up “Goal Fabric” analytic methodology (discussed in Chapter 4) to identify actions needed to resolve the identified issues and organize those actions into an overarching plan to ensure consistent application of disability policy across and within the services. One of the ten categories of interventions that resulted from this approach was a training intervention that focused on resolving current performance issues.

In recognizing that consistent application of disability policy is just one means of addressing unwarranted variability in differential treatment of similarly situated service members, we also focused on overall DES performance. To focus on system performance, we employed a purpose-driven, top-down approach and developed a statement of purpose and desired outcomes. This approach and statement serve as guideposts for developing a comprehensive disability evaluation training intervention and a management information system to monitor the effectiveness of the recommended training program and overall system performance over time.

FINDINGS AND RECOMMENDATIONS

The major findings presented in this report cover four areas: (1) developing a basis for assessing DES performance; (2) identifying issues of variability in DES policy application and recommended interventions; (3) conducting a DES training analysis and recommending changes in training to improve system performance; and (4) developing a recommended method for continuously monitoring DES performance.

3A purpose statement describes the fundamental and unchanging reason the DES exists. It differentiates the DES from other human-resource management systems (and tools).

4Desired outcomes explicitly describe the intended results of operating the system to achieve its stated purpose—the results that matter to DES customers.
A Basis for Assessing DES Performance

To assess any system’s performance, it is first necessary to understand the system’s fundamental purpose and its desired outcomes. The system’s stated purpose is the foundation for designing, redesigning, organizing, and monitoring every aspect of the system.

We found that no shared statement of purpose for the DoD DES existed; therefore, we constructed a DES purpose statement and a set of desired system outcomes in order to develop our recommendations. We determined that the DES exists to evaluate service members with potentially unfitting conditions in a fair, consistent, efficient, and timely manner and, likewise, to remove those unable to fulfill the duties of their office, grade, rank, or rating, and determine a disability rating percentage for those removed.

We likewise constructed the following set of desired system outcomes:

1. Service members having a similar condition and similar office, grade, rank, or rating receive similar fitness decisions within the military department.
2. Service members found unfit receive similar disability ratings for similar conditions across and within the military departments.
3. Service members freely and appropriately exercise their rights to administrative due process.
4. Service members return to duty, or separate or retire for disability, in a timely manner.
5. Primary participants perform their duties as efficiently as possible so that, collectively, they return service members to duty, or separate or retire them for disability, in a fair, consistent, and timely manner.

Because a common, shared purpose and set of desired outcomes do not currently exist, reaching consensus on these constructs is an important first step in the development of interventions to improve the performance of the DES. Therefore, we recommend that the Assistant Secretary of Defense for Force Management Policy (ASD/FMP) develop a statement of purpose and desired outcomes for the DES to serve as the basis for the DoD DES training program.

Issues of Variability in DES Policy Application and Recommended Interventions

We identified 43 issues—regarding variability in policy application across or within the military departments or problems identified by primary participants—that effect the performance of the DES. The issues-based, bottom-up analysis suggested the

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5In unfitting condition is a term commonly used in DES policy. Although not explicitly defined in DoD or U.S. statutory documents, the term could be said to refer to "a medical condition resulting from disease or injury that makes a service member unfit to perform the duties of the member’s office, grade, rank, or rating" (DoD Directive 1332.18, 1996, p. 2; DoD Directive 6130.3, 1994, p. 1).
following ten categories of broad-based interventions consisting of specific actions for resolving the various issues we identified. We recommend that the DES leadership adopt and act upon these interventions in the context of a near-term plan, as detailed in Chapter 4:

• Assistant Secretary of Defense Decisions
• Policy Guidance
• Organizational Change
• Personnel Policy
• Personnel Management
• Training
• Information Source Development
• Management Information System Deployment
• Process
• Incentives.

Because the recommended interventions are based on reported or observed instances of policy application—information that is not necessarily complete, objective, or empirically based—we expect that the interventions are not as finely tuned as they otherwise might be.

**DES Training Analysis and Recommended Changes in Training to Improve System Performance**

For the third research task in this study, we present a comprehensive training needs analysis and training recommendations to improve DES performance.

We identified 12 primary participant populations who require specific bodies of knowledge and skills to execute disability policy throughout the military departments. We examined various aspects of the target training population, such as characteristics, turnover, geographic dispersion, subject-matter expertise and variation in levels of required disability evaluation expertise, and computer literacy.

Given the existing job designs for the primary participant populations, we translated the DES purpose and desired outcome statements that we constructed into statements of general competencies for 10 of the 12 primary participant populations. Those primary participant populations, and their respective competencies, are as follows:

**Physicians Who Write Narrative Summaries**

• are able to determine the appropriate diagnosis
• are able to determine if a service member’s condition calls into question his or her ability to meet medical retention standards
• are able to synthesize a service member’s medical evidence from all appropriate consultations into a single narrative summary that contains sufficient information in the appropriate format for a PEB to adjudicate the case.

**PEBLOs and Disability Evaluation Counselors**

• are able to advise service members on the DES process; their rights, benefits, and entitlements; and what to expect as the service member’s medical board progresses through the DES
• are able to gather and process patient information to assemble medical boards (case files) that contain sufficient information in the appropriate format for a PEB to adjudicate the case.

**Patient Administrators**

• are able to assist Medical Evaluation Boards and PEBLOs in gathering and processing patient information to assemble medical boards that contain sufficient information in the appropriate format for a PEB to adjudicate the case.

**Medical Evaluation Board Members**

• are able to determine whether the medical board includes appropriate specialty consultations with sufficient information
• are able to determine the duty limitations associated with the diagnosis
• are able to determine whether the service member meets the military department’s medical retention standards for continued military duty.

**Medical Evaluation Board Approving Authorities**

• are able to identify complete and accurate medical boards.

**PEB Administrative Action Officers**

• are able to ensure that contents of medical boards received by the PEB are complete and accurate for adjudication
• are able to obtain missing information, monitor and move medical boards through the system, and exchange information with PEBLOs.

**Physical Evaluation Board Members**

• are able to apply disciplined military department fitness standards in a uniform manner
• are able to apply other rules uniformly such that members having similar conditions and a similar office, grade, rank, or rating receive similar disability ratings across and within the military departments
• are able to document the substantial evidence that supports all PEB decisions.
Physical Evaluation Board Approving Authorities

- are able to identify consistent application of military department fitness standards such that members having similar conditions and similar office, grade, rank, or rating receive similar fitness decisions within the military department.
- are able to identify consistent application of other rules such that members having similar conditions receive similar disability ratings across and within the military departments.
- are able to identify sufficient documentation of the substantial evidence that supports all PEB decisions.

Post-PEB Appellate Review Board Members

- are able to apply disciplined military department fitness standards in a uniform manner.
- are able to apply other rules uniformly such that members having a similar condition receive similar disability ratings across and within the military departments.
- are able to document the substantial evidence that supports all decisions.

Unit Commanders

- are able to provide written evidence with sufficient detail for PEB consideration that documents their judgment of how a service member’s medical condition impacts the member’s ability to perform the duties of his or her office, grade, rank, or rating, and specifically how the condition impacts his or her ability to deploy, and whether there are any pending adverse actions against the service member.

The desired system outcomes not only shape the performance competencies for individuals assigned to the DES, they suggest specific knowledge necessary for physicians who refer service members, unit commanders (both active and Reserve) who interact with the DES, and attorneys who advise and represent members. The desired outcomes point to a DoD training emphasis on DES topics and skills in applying knowledge of those topics across the military departments. Likewise, the OSD’s focus on consistent policy application suggests that DES topics and the associated skills required to apply knowledge of those topic areas are the most relevant aspects of a DoD training intervention.

As a result, we compiled a comprehensive list of DES training topics from policy documents and military departments’ current training syllabi. We associated each suggested topic with the primary participant populations who require knowledge of that topic to produce the desired on-the-job results, recognizing that different populations may apply the same knowledge differently in their respective jobs.

The proposed competencies, together with the analysis of required primary participant population knowledge of specific DES topics to achieve desired on-the-job re-
results, indicates that the primary participant populations require different levels of knowledge for many of the same DES topics. We sorted the primary participant populations that require essentially the same level of knowledge of the same set of DES topics into five population clusters, as shown in Table S.1.

Further analysis suggested designing the training content—the DES topics for instruction—as five distinct training packages, one per population cluster.

Other considerations in addition to the system’s stated purpose, desired outcomes, competencies, and content affect training design. To inform the format and timing of recommended training, we assessed the following considerations: DES-specific knowledge often needed immediately upon assignment; frequency of use of DES topics within the primary participant populations’ bodies of knowledge; assignment practices that cause high turnover rates among some primary participant populations; and military departments’ DES Web sites.

We observed a common cultural trait across all the military departments—a high commitment to excellence in training, regardless of the training method. Numerous studies in the training literature report “no significant difference” in learning results between self-directed computer-based distance training and traditional classroom training. We compared current military department training practices with the proposed training packages (developed and monitored by the OSD) and analyzed the advantages and disadvantages of designing the DES training program as a self-directed, computer-based distance-training program or as a classroom-training program. Based on our analysis, we recommend that the Office of the ASD/FMP develop and monitor knowledge-based training in which the content focuses on the suggested list of DES topics that collectively constitute a specific body of knowledge for each primary participant population cluster. We further recommend delivering this knowledge-based training through a Web site devoted to disability evaluation training, which is made accessible to all primary participants.

### Table S.1

**Primary Participant Population Clusters**

| Population Cluster 1 | PEBLOs and disability evaluation counselors  
|----------------------|-----------------------------------------------  
|                      | Patient administrators  
|                      | PEB administrative action officers  
| Population Cluster 2 | Physicians who write narrative summaries  
|                      | Medical Evaluation Board members  
|                      | Medical Evaluation Board approving authorities  
| Population Cluster 3 | PEB members  
|                      | PEB approving authorities\(^a\)  
|                      | Appellate Review Board members  
|                      | Attorneys who represent and advise service members  
| Population Cluster 4 | Active component unit commanders  
| Population Cluster 5 | Reserve component commanders  

\(^a\)These authorities are the Deputy Commander, Army Physical Disability Agency; President, Physical Evaluation Board (Department of the Navy); and Chief, Air Force Physical Disability Division.
This self-directed computer-based distance training is a basic course in disability evaluation. See Table 5.2 in Chapter 5, which organizes a comprehensive list of DES topics into five distance-training packages, each designed to meet the training needs of a particular cluster of primary participant populations. The table further organizes the topics roughly in descending order of common training needs across population clusters, starting with those topics that all population clusters require knowledge of, and ending with those topics required by only one cluster.

All five population clusters require knowledge of many of the same DES topics, although different population clusters need to know how to apply some topics in different ways to achieve their specific, desired on-the-job results. Although the different training packages contain many of the same DES topics, the learning objectives, content presentation, and criterion referencing should match the specific job application needs of each target population cluster (and some learning objectives, content presentation, and criterion referencing will be the same for different population clusters).

We assumed that the OSD develops a Web site devoted to disability evaluation training and establishes the recommended self-directed, computer-based distance-training packages. We further assumed the training packages “teach” the DES bodies of knowledge to the degree intended. We then asked the following question: Do primary participants require additional training to apply policy consistently across and within military departments to produce the desired on-the-job results?

To answer this question, we reexamined the proposed primary participant competencies. The competency statements suggest that PEB members, PEB approving authorities, and post-PEB appellate review board members across military departments, in particular, stand to benefit from collaboration with peers on how to uniformly apply the rules, procedures, and other considerations in determining fitness, assigning the VASRD or analogous codes, and assigning disability ratings.

Likewise, Medical Evaluation Board members and approving authorities across military departments stand to benefit from collaboration with peers in how to apply disciplined medical retention standards uniformly, such that members having a similar condition and similar office, grade, rank, or rating receive similar medical retention decisions. Attorneys who advise and represent members are also likely to benefit from collaboration with Medical Evaluation Board members and approving authorities, PEB members and approving authorities, and appellate review board members across military departments during classroom training.

We recommend supplementing the DoD self-directed computer-based distance-training packages with DoD traditional classroom training for PEB members and approving authorities, post-PEB appellate review board members, and Medical Evaluation Board members and approving authorities across the military depart-

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6Criterion referencing refers to the method of testing that is most often used in self-directed computer-based distance training. The test questions are written directly from the stated learning objectives and can be answered directly from the material presented. In other words, criterion-referenced tests contain no hidden meanings or trick questions.
ments. The classroom training focuses on applying a particular set of DES topics to develop the skills necessary to evaluate and adjudicate cases and apply disability policy consistently across and within the military departments. The classroom training is designed explicitly to supplement the self-directed computer-based distance training. As such, completing the appropriate distance-training package is a prerequisite for enrolling in classroom training, evidenced perhaps by a certificate of self-certified mastery of the required knowledge and skills. Learning objectives, content, and student learning evaluation differ from the distance-training packages in that they focus on applying a particular set of the DES topics learned in the distance-training packages to a variety of real-life cases.

The DES topics shown in Table 5.3 in Chapter 5 form the basis for classroom-training content. That set of DES topics enables students to practice applying the numerous standards, rules, procedures, and other considerations to a wide variety of case studies in a controlled classroom environment in which students collaborate on making decisions that result in consistent dispositions.

Both the self-directed computer-based distance-training packages and the classroom-training package rely on experienced and credible subject-matter experts who are able to develop and deliver high-quality training that produces the desired on-the-job results from the trained populations. These subject-matter experts serve as adjunct faculty who are delegated authority by the OSD to develop and deliver the DoD disability evaluation training.

The self-directed computer-based distance-training packages and the classroom-training package are based on the system purpose and desired outcomes that informed the primary participant competencies proposed in this report.

Like the suggested statements of DES purpose, desired system outcomes, and primary participant competencies, the training analysis and the resulting training packages are presented as a template, or a starting point, for consideration by the Office of the ASD/FMP, in consultation with the Assistant Secretary of Defense/Health Affairs (ASD/HA) and the Assistant Secretary of Defense/Reserve Affairs (ASD/RA), and representatives of the military departments’ PEBs and Office of the Surgeons General.

We derived the suggested DES purpose statement and set of DES desired outcomes from DoD and military department documents and from interviews with primary participants. As a result, they should be generally acceptable to decisionmakers in the OSD and military departments; however, we did not attempt to secure agreement from those decisionmakers. Rather, we believe it is essential for the ASD/FMP, in consultation with the ASD/RA and ASD/HA, to decide on a stated DES purpose and set of desired outcomes, using our proposed framework as a starting point. The objective of the ASDs’ deliberations is a common framework for developing a sense of ownership of the DES purpose and desired outcomes—the purpose and desired outcomes inform all other decisions and interventions.

Whatever statement of DES purpose and desired system outcomes, and statements of primary participant competencies, are decided upon should form the basis for
conducting a comprehensive training needs assessment which should, in turn, inform development of training packages to enable the primary participants to produce the desired on-the-job results.

If a later assessment of training effectiveness demonstrates that these training packages do not enable the primary participant populations to produce the desired on-the-job results, the OSD should modify the training packages so that they perform as intended.

We estimate that this training program (the combined self-directed computer-based distance-training packages and the classroom-training package) will cost approximately $12.8 million for a five-year training time frame (the majority of this cost is the opportunity cost for course participation). But, the DoD can accrue an estimated $15.2 million in quantifiable benefits from this program in addition to a variety of nonquantifiable benefits.

A Method for Continuously Monitoring DES Performance

To evaluate a system and improve its performance, it is necessary to have a systematic method for tracking how well the system is functioning. We developed a number of performance measures (and metrics that support those measures) that can be used to monitor how well the DES meets external customer expectations, which we defined in terms of the purpose and outcomes of the DES. The DES exists to serve two categories of external customers: service members and individual military services. For service members, expectations center on similar dispositions (among service members in similar circumstances) and due process. For the military services, expectations center on expeditious processing and efficient operations.

The performance measures we developed encompass direct customer perceptions of how well the DES meets their expectations and indirect, but more objective and quantitative, measures of performance. The indirect measures include outcome, output, and input measures that are linked in a framework that identifies the relationship among the measures and how they affect overall system performance. Outcome measures include case variability, number of appeals, time to replace an unfit service member, and total system cost. Output measures include percentage of primary participants certified, productivity, cost per case, average processing time, number of reworks, and time to promulgate policy change. The sole input measure is total resources.

We recommend that the OSD develop and maintain a comprehensive management information system capable of monitoring relevant performance measures that enable leaders to assess, analyze, and take action to continuously improve the performance of the DES. We further recommend that the OSD summarize the information gleaned from the data, which are gathered and analyzed, and share that information with DES primary participants so that they may also act on it to continuously improve DES performance.