The U.S. Department of Defense (DoD) is among the federal agencies that have fallen short in their ability to hire a representative number of civilians from particular demographic groups—one of the federal government’s personnel priorities. To assess the severity of the problem and provide a foundation for improving representation, RAND Corporation researchers conducted a barrier analysis, a type of analysis that seeks to determine whether discrepancies exist in hiring among demographic groups and, if so, to uncover the causes. RAND researchers have conducted barrier analyses for many organizations, including the U.S. Department of Justice, the Drug Enforcement Administration, and civilian law enforcement organizations. Because of the important insights that this type of analysis can uncover, senior leaders in federal agencies need to understand and support these assessments. Identifying representation discrepancies is only one step; a thorough assessment of the underlying causes of these discrepancies is equally important and one that agencies might neglect.
To draw on RAND’s expertise in conducting barrier analyses, the Office of Diversity Management and Equal Opportunity within the Office of the Secretary of Defense asked RAND to conduct a systematic assessment of two groups of interest to DoD: Hispanics and people with targeted disabilities (PWTDs).

The researchers’ assessments showed underrepresentation in the civilian DoD workforce for both groups. Using analysis of relevant quantitative data, interviews with and a survey of hiring managers and supervisors, and interviews with other experts, the team identified employment barriers and actions that DoD can take to address them. This brief summarizes the results.

Group 1: Hispanics

Recent Office of Personnel Management (OPM) reports have shown underrepresentation of Hispanics in the federal government in comparison with the U.S. labor force. These reports have also shown that, in comparison with other departments in the federal government, DoD has one of the lowest proportions of Hispanics in its workforce. These analyses, however, do not sufficiently consider what might have contributed to limited DoD employment of this group. Thus, identifying these employment barriers became the focus of the barrier analysis.

Hispanic Representation in the Department of Defense Workforce

In 2013, 6.5 percent of DoD employees were Hispanic citizens, much less than the 9.3 percent among other federal civilian workers and 11.4 percent of the civilian labor force (if the analysis includes noncitizens as well, the latter percentage goes up to 15.6 percent). Hispanic representation in the civilian labor force and the non-DoD federal civilian workforce also increased more rapidly from 2008 to 2013 than its DoD counterpart. These discrepancies between the number of Hispanics in the DoD civilian workforce and elsewhere indicate possible employment barriers.

Different parts of DoD vary in employment of Hispanics. In 2013, the Department of the Army had the highest proportion of Hispanics among civilian workers (7.4 percent), while the non–military department DoD entities (i.e., the Fourth Estate) had the lowest: 5.2 percent.

In addition to data on overall workforce participation for Hispanics, other measures indicate possible employment barriers. Hispanics made up 5.2 percent of new hires but 6 percent of exits in the DoD workforce from 2008 to 2013. They were more concentrated in occupations with lower rates of promotion and were less likely to be promoted in occupations with higher rates of promotion. Hispanics made up 8.0 percent of the DoD civilian workforce in General Schedule lower grades, 6.0 percent in middle grades, and 4.5 percent in upper grades.

Why Are Hispanics Underrepresented?

To begin to answer this question, the team analyzed whether any particular differences between the Hispanic workforce, the non-DoD federal workforce, and the civilian labor force might explain Hispanic underrepresentation in DoD. The results show that characteristics of the Hispanic workforce in general—education, citizenship, veteran status, age, location, and occupation—explain nearly the entire gap in Hispanic presence in the civilian labor force (15.6 percent) versus the DoD civilian workforce (6.3 percent) (see Figure 1). Only a gap of 0.7 percentage points is unexplained.

Figure 1. Differences in Hispanic Representation Between the Department of Defense Workforce and the Civilian Labor Force

<table>
<thead>
<tr>
<th>Representing gap: 9.3 percentage points</th>
<th>In the civilian labor force</th>
<th>In the DoD civilian workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the civilian labor force</td>
<td>15.6%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

What Is Barrier Analysis?

Barrier analysis is a systematic assessment approach that can be used to identify potential obstacles to obtaining resources, participating in a program, or working in an organization. One use of barrier analysis is to help employers understand diversity-related challenges in their workforces. Employment barriers can occur at any stage of the career life cycle—recruitment, hiring, promotion, and retention practices—and barrier analysis helps examine each key point.

- **Phase 1:** Develop a detailed flowchart of the workforce management process at key points in the career life cycle, providing a foundation for analysis and change. Collect information from such sources as administrative databases, policy documentation, and interviews with key personnel.

- **Phase 2:** Construct population benchmarks or, if those are not available, a well-considered and explicated representation goal. Use these to determine whether certain groups are over- or underrepresented in the workforce. Gather benchmarks on a relevant comparison group (for DoD, a relevant comparison group would be the national civilian labor force or the non-DoD federal government workforce).

- **Phase 3:** Compare the employee distribution with benchmarks or goals to determine whether a discrepancy exists and, if so, where in the career life cycle (for example, determine whether there are adverse impacts in the hiring or promotion processes).

- **Phase 4:** Identify potential barriers, specifically those that affect advancement of the group or groups of interest. Use such sources as administrative data, workforce surveys, and interviews to gather information about barriers.

- **Phase 5:** Address and remove barriers, removing or mitigating the barriers identified in phase 4. When developing and implementing solutions, identify the goals or objectives that the solutions are intended to address and ensure that the solutions are well-defined and time-bound. Once they are implemented, track and evaluate changes over time to determine the extent to which solutions meet the intended goals; implementing a solution without a plan to evaluate its effectiveness is not enough.

Also, analysis of job-applicant data suggests that Hispanics are underrepresented throughout the hiring process and that their participation decreases as the process progresses. Analyses of DoD job characteristics might explain why fewer Hispanics apply and are subsequently hired for jobs. Among DoD jobs offered in 2014, job location has perhaps the greatest effect. Jobs in states that, like New Mexico, have higher proportions of Hispanics in the general population, are more likely to receive Hispanic applicants than jobs elsewhere. There is also some evidence that Hispanic DoD applicants might be more interested in work requiring less education or experience—perhaps because Hispanics in the civilian labor force, on average, are younger and less educated than non-Hispanics. Similarly, jobs at higher pay grades were less likely to receive Hispanic applicants.

During interviews with the research team, DoD representatives pointed to other potential barriers to Hispanic employment. The most–frequently mentioned include geographic location of positions (also observed in our analyses of job characteristics, described above), perceptions of language or citizenship barriers, a lack of awareness and motivation from leaders and managers to address Hispanic underrepresentation, and few hiring strategies specifically targeting Hispanics. In addition, DoD representatives observed that potential applicants perceive the USAJOBS process by which people apply for federal positions to be cumbersome and time-consuming, which might deter applicants from applying and make it difficult for DoD to compete with the private sector for these workers.

Representatives from Hispanic-serving institutions (HSIs), which are not-for-profit institutions where Hispanic enrollment is a minimum of 25 percent of the total enrollment, echoed the complexity of the application process as a potential barrier. They also noted that DoD engagement with their students was limited. Other potential barriers they cited included students’ lack of awareness of DoD civilian opportunities and students’ reluctance to relocate to new areas. To overcome this reluctance, HSI representatives suggested, DoD should connect with students’ families when possible and work to build networks for new employees once relocated.

Recommendations

The researchers’ findings suggest several potential options that DoD might pursue in assessing and improving Hispanic representation in the DoD civilian workforce. These recommendations address each phase of the employment cycle, from outreach to retention:

- **Expand DoD outreach to the Hispanic population, especially to younger workers in U.S. Hispanic population centers.** The Hispanic-representation gap in DoD might not improve without proactive efforts to increase Hispanic awareness of opportunities to work for DoD. Expanded outreach efforts should focus most heavily on younger potential workers, among whom underrepresentation is the highest, and in states where DoD has a substantial presence and the Hispanic population percentage is high.

- **Increase DoD presence with Hispanic student populations at colleges and universities, particularly HSIs.** This will help increase awareness of DoD civilian opportunities and application processes, allow face-to-face interactions with potential applicants, and offer opportunities to interact with students’ families to share information about DoD careers.

- **Stay engaged with promising candidates during the application process, and, when possible, leverage appropriate hiring authorities.** To combat potential barriers in the application and hiring processes, DoD should encourage recruiters, hiring managers, and other relevant personnel to follow up with promising candidates and encourage them to stay engaged with DoD.

- **Support the development of Hispanic-friendly communities in the workplace through employee resource groups and mentoring.** By fostering an inclusive environment that is welcoming to Hispanics, DoD can help Hispanic workers flourish in their jobs and stay in DoD careers—improving promotion opportunities for Hispanic employees and retention rates for the department.

- **Improve the accessibility, accuracy, and utility of job-applicant data.** DoD should review the process of collecting data from USAJOBS so as to improve the accuracy of applicant information. Current limitations in how DoD collects and uses applicant data could lead to erroneous conclusions and analytic errors over time.
Group 2: People with Targeted Disabilities

DoD is also interested in better understanding representation of PWTDs in its civilian workforce and how to improve it. Different national data sets use different definitions of disability, and that appears to influence representation levels in those data sets. Those discrepancies hinder comparison of federal workforce representation levels with those seen in the U.S. national data sets. Given that, the U.S. Equal Employment Opportunity Commission has established a 2-percent representation goal for PWTDs in the federal civilian workforce. Participation rates lower than this goal indicate possible barriers to employment within DoD.

Representation of People with Targeted Disabilities in the DoD Workforce

The researchers’ analyses demonstrated that DoD did not meet the federal representation goal during the years for which they had data, 2008–2013. In addition, DoD had lower representation of PWTDs than the non-DoD federal workforce, and workforce characteristics do not explain this difference as they did with Hispanics. The proportion of PWTDs in the DoD civilian workforce is 0.42 percentage points lower than that in the non-DoD federal workforce. To be on par with the non-DoD federal workforce, DoD would need to increase the level of employment of this group by more than 50 percent, or more than 2,500 workers.

However, for people with any disabilities—not limiting the data to those with targeted disabilities—levels of representation in DoD met or exceeded those seen in the non-DoD federal workforce. This appears to be due to relatively high levels of employment in DoD of veterans with disabilities. If these veterans have targeted disabilities that have not been reported, the reported data would underestimate the number of PWTDs in DoD’s civilian workforce.

Trends associated with PWTDs in the DoD civilian workforce also suggest the presence of barriers. PWTDs enter at a lower rate than they separate, and they separate at higher rates than those without targeted disabilities. PWTDs are more likely to be hired into lower grades, on average, than those without targeted disabilities. Altogether, compared with people without targeted disabilities, PWTDs are underrepresented among higher-promoting occupations, are promoted at lower rates in those occupations, and are underrepresented in higher grades.

Why Are People with Targeted Disabilities Underrepresented?

Interviews with DoD representatives highlighted challenges to the employment of PWTDs. When asked what contributed to low PWTD-representation rates, more than half of interviewees named unconscious prejudice (implicit bias) against PWTDs, making it the most frequently mentioned potential barrier. A data limitation that some interviewees noted was that employees with targeted disabilities, particularly those who are veterans, are reticent to disclose their disability status.

Other barriers mentioned included limited opportunities in certain occupations, issues with providing reasonable accommodations to PWTDs, and a lack of awareness among hiring managers about relevant hiring authorities available to agencies to promote employment of individuals with disabilities. With respect to career development, interviewees noted that PWTDs have limited opportunities in mission-critical occupations and outside entry-level positions, as well as limited training or other career-development opportunities, because of the lack of reasonable accommodations. They noted that reasonable accommodations and a welcoming and inclusive work environment could boost retention of employees with targeted disabilities.

Interviews with representatives from universities that are designed for people with disabilities or that include large numbers of students with disabilities identified other potential contributors to relatively low representation levels: Students with disabilities lack confidence about obtaining employment, students are not aware of DoD civilian job opportunities, organizational cultures are not welcoming to PWTDs, and there are challenges associated with documentation for Schedule A eligibility (a hiring authority that federal agencies can use to promote employment of people with disabilities).

The researchers’ survey of DoD civilian hiring managers and supervisors provided additional perspective. Overall, the responses suggest that harmful behaviors toward PWTDs in DoD are rare and that perceptions
**What Survey Topics Can Inform Barrier Analysis?**

A survey can be used to examine attitudes and perceptions toward a group of interest in the workforce, obtain recent information about employee knowledge of relevant employment policies and practices, and assess perceptions and experiences relevant to employment aspects addressed in an organization's operational plan. Drawing from the PWTD survey and previous research, we list several broad topic areas, and example questions, that organizations might use in a survey (see the table below).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample Item</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGENCY AND OFFICE CHARACTERISTICS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal communication</td>
<td>How well does your agency communicate its goals for the employment of people with targeted disabilities?</td>
<td>1 = very poorly to 5 = very well</td>
</tr>
<tr>
<td>Accountability</td>
<td>My agency holds supervisors accountable for enhancing employment opportunities for people with targeted disabilities.</td>
<td>1 = completely disagree to 5 = completely agree</td>
</tr>
<tr>
<td>Outreach and recruitment</td>
<td>My agency actively recruits people with targeted disabilities.</td>
<td>1 = completely disagree to 5 = completely agree</td>
</tr>
<tr>
<td>Ability to provide accommodations</td>
<td>My agency is able to provide reasonable accommodations for people with targeted disabilities.</td>
<td>1 = completely disagree to 5 = completely agree</td>
</tr>
<tr>
<td>Knowledge and use of relevant authorities and resources</td>
<td>How familiar are your agency’s employees with Schedule A provisions through which people with disabilities can be exempted from the competitive appointment process?</td>
<td>1 = not at all familiar to 5 = extremely familiar</td>
</tr>
<tr>
<td>Relevant training</td>
<td>In the past year, how much of the formal training that you have received was on improving employment opportunities for people with targeted disabilities or on similar disability-related topics?</td>
<td>0 = none to 4 = two or more days</td>
</tr>
<tr>
<td><strong>POSSIBLE EMPLOYEE STEREOTYPES, PREJUDICE, AND DISCRIMINATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereotypes</td>
<td>As perceived by employees in your agency, how successful have employees with targeted disabilities been in your agency?</td>
<td>1 = not at all to 5 = extremely</td>
</tr>
<tr>
<td>Prejudice</td>
<td>How positive do employees in your agency feel toward employees with targeted disabilities?</td>
<td>1 = not at all to 5 = a great deal</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Do employees in your agency ever harass employees with targeted disabilities?</td>
<td>1 = never to 5 = quite a lot</td>
</tr>
<tr>
<td>Interactions and contact</td>
<td>How good are your interactions with your current coworkers with targeted disabilities?</td>
<td>1 = very poor to 5 = excellent</td>
</tr>
<tr>
<td><strong>EMPLOYMENT BARRIERS AND RESPONSES TO THESE BARRIERS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment barriers</td>
<td>Does limited supervisor knowledge about what accommodations to make pose a barrier to employment for people with targeted disabilities in your agency?</td>
<td>1 = not a barrier to 5 = extreme barrier</td>
</tr>
<tr>
<td>Response to barriers</td>
<td>How effective do you think that training on DoD resources available to help with the process of identifying and implementing accommodations would be in reducing barriers to employment of people with targeted disabilities in your agency?</td>
<td>1 = not at all effective to 5 = extremely effective</td>
</tr>
</tbody>
</table>
of PWTDs in DoD are broadly positive. For example, respondents perceived that incivility toward PWTDs is uncommon in DoD, as the responses to four survey items in Figure 3 illustrate. However, few appear to be familiar with goals and policies for employment of PWTDs. Only 17 percent correctly indicated that the employment goal for PWTDs was 2 percent, a statistic that supports interview comments regarding limited awareness among hiring managers.

Communication of goals for employing PWTDs, holding employees accountable for creating a positive work environment for PWTDs, and higher frequency of high-quality interactions with PWTDs were associated with more-positive perceptions of PWTDs. Although respondents did not show a strong consensus on the impact of specific barriers, they reported perceiving limited information available about how to enhance employment rates of PWTDs and lack of requisite skills among applicants with targeted disabilities to be stronger barriers than, for example, negative attitudes toward or stereotypes of PWTDs.

**Recommendations**

The assessment suggests several potential ways to assess and improve representation of PWTDs in the DoD civilian workforce:

- **Use targeted outreach to increase awareness of DoD civilian opportunities for PWTDs**, such as campus outreach at universities that is designed for students with disabilities or connections with programs for students with disabilities at universities with large populations of such students.

- **More effectively leverage vetted talent pools of potential job candidates with targeted disabilities**. The OPM Shared List of People with Disabilities and the Workforce Recruitment Program are two such resources for vetted Schedule A–eligible job candidates.

- **Better educate employers and applicants about the process for hiring PWTDs**. A lack of knowledge about hiring practices was a recurring theme in interviews and survey responses. Increasing leadership and employee awareness of DoD disability policies, programs, and resources should improve that.
• Inform, educate, and hold supervisors and managers accountable for meeting disability representation goals. DoD needs to better communicate goals for representation of PWTDs and to modify outreach and education on hiring processes.

• Address targeted-disability disclosure, particularly among U.S. veterans. Potential underreporting of targeted disabilities makes it difficult to measure and address targeted-disability representation.

• Increase understanding of the U.S. population with targeted disabilities. The most significant limitation to understanding barriers to federal employment for PWTDs is the lack of comparable, systematic knowledge of the characteristics of PWTDs in the U.S. labor force—where they live, whether they are seeking employment, their desired occupations, and their relevant education and work experience. This lack of information limits the effectiveness of DoD efforts to attract and recruit PWTDs.

Summary

The assessments of the Hispanic population and the population of PWTDs within DoD highlighted a variety of reasons that these groups tend to be underrepresented in the DoD workforce. The recommendations identify ways in which existing barriers might be overcome to increase representation of these groups in the DoD civilian workforce. There is a final recommendation common to each assessment that applies to any action DoD takes to address representation challenges for these groups: Systematically evaluate DoD efforts to promote employment for Hispanics and PWTDs to determine whether those efforts have an impact. Well-planned and carefully executed evaluation efforts can inform the actions DoD takes to address representation in its workforce.