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COGNITIVE DECLINE AND THE WORKPLACE

 $Sharona\ Hoffman$

COGNITIVE DECLINE AND THE WORKPLACE

Sharona Hoffman*

Cognitive decline will increasingly become a workplace concern because of three intersecting trends. American population is aging. In 2019, 16.5 percent of the population, or fifty-four million people, were age sixty-five and over, and the number is expected to increase to seventyeight million by 2025. Dementia is not uncommon among older adults, and by the age of eighty-five, between 25 and 50 percent of individuals suffer from this condition. Second, many individuals are postponing retirement and prolonging their working lives. For example, about a quarter of physicians are over sixty-five, as are 15 percent of attorneys. The average age of federal judges is sixty-nine. Third, a variety of technologies, such as positron emission tomography ("PET") scans, spinal taps, genetic tests, and even blood tests now enable physicians to detect potential signs of dementia long before symptoms emerge. Employers may well be tempted to pursue these diagnostic tools because cognitive decline can cause a multitude of complex challenges in the workplace, threatening productivity, workplace morale, and public safety.

The question of how to handle cognitive decline in the workforce has received very limited attention in the legal literature. This Article strives to treat the subject in a balanced way, considering the interests and difficulties faced by all stakeholders: employers, workers, and the public. It examines and critiques a variety of strategies that employers could implement, including mandatory retirement ages,

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mandatory cognitive testing for older employees or all employees, testing for dementia biomarkers, and an approach of individualized assessment. It evaluates these approaches in light of the relevant federal laws that prohibit age, disability, and disparate impact discrimination and suggests necessary statutory revisions. The Article concludes with detailed recommendations to help employers, employees, and professional associations appropriately manage this very sensitive matter.

TABLE OF CONTENTS

INTR	ODUCTION	117
I.	COGNITIVE DECLINE	
	A. Cognitive Decline Facts and Figures	
	B. Testing for Cognitive Decline	
	C. Testing for Alzheimer's Disease Biomarkers	128
II.	WORKPLACE CONCERNS	130
	A. Attorneys	131
	B. Judges	
	C. Physicians	
III.	THE FEDERAL ANTIDISCRIMINATION STATUTES: THE	
	ADEA, THE ADA, AND TITLE VII	137
	A. The ADEA	137
	B. The ADA	139
	1. Disability	139
	2. Qualified	140
	3. Direct Threat	140
	4. Reasonable Accommodation	141
	5. Medical Examinations and Inquiries	142
	C. Title VII	
IV.	APPLYING THE LAW: WHAT EMPLOYERS CAN AND	
	CANNOT DO	144
	A. Mandatory Retirement	145
	1. ADEA Violation	145
	2. Policy and Ethical Considerations	146
	B. Mandatory Cognitive Testing Beginning at a	
	Particular Age	147
	1. ADEA Violation	147
	2. ADA Violation	
	3. Disparate Impact Concerns	149
	4. Privacy Concerns	
	C. Mandatory Cognitive Testing for All Employees	151
	1. ADA and Disparate Impact Concerns	
	2. Cost and Employee Buy-in	153
	D. Testing Employees for Alzheimer's Disease	
	Biomarkers	154
	1. ADA Constraints	154

		2. The Limits of ADA Protections	155
		3. The Genetic Information Nondiscrimination	
	E.	Permitted Cognitive Testing and Employment Ac	
		1. Lawful Testing	
		2. Reasonable Accommodation	
		3. Termination of Employment	
V.	STA	ATUTORY REVISIONS	
		Expanding the Definition of Disability	
	B.		
VI.	AD	DITIONAL RECOMMENDATIONS	
		The Employee's Role	
		The Employer's Role	
		1. Training	
		2. Wellness Programs	
		3. Taking Appropriate Action	
	C.	The Role of Professional Associations	
Conclusion			172

INTRODUCTION

Dr. Michael Stern, a sixty-nine-year-old chief psychologist at an Illinois hospital, showed startling signs of job performance difficulties.¹ Coworkers reported that he had severe memory problems and forgot appointments, meetings, and treatment preapproval procedures.² He also exhibited impulsive behavior, failed to record necessary information in patient charts, and had other performance deficiencies.³ After extensive cognitive testing, Dr. Stern was found to be unfit for duty and was ultimately fired from his job.⁴

Dr. Stern is not alone. When Yale New Haven Hospital tested its clinicians who were seventy and older, it found that 12.7 percent displayed significant cognitive deficits.⁵ The problem is not limited to the medical field. University professors may become incompetent teachers and yet remain faculty members.⁶ Concerns about

^{1.} Stern v. St. Anthony's Health Ctr., 788 F.3d 276, 280 (7th Cir. 2015); Complaint at 2, Stern v. St. Anthony's Health Ctr., No. 12-cv-785-SCW, 2013 WL 5967746 (S.D. Ill. Nov. 8, 2013).

^{2.} Stern, 788 F.3d at 280.

^{3.} *Id*.

^{4.} Id. at 283–84.

^{5.} Leo Cooney & Thomas Balcezak, Cognitive Testing of Older Clinicians Prior to Recredentialing, 323 JAMA 179, 180 (2020); Tia Powell, OK, Boomer, MD: The Rights of Aging Physicians and the Health of Our Communities, HASTINGS CTR. REP., Nov.—Dec. 2020, at 3, 3.

^{6.} Beverley Earle & Marianne DelPo Kulow, The "Deeply Toxic" Damage Caused by the Abolition of Mandatory Retirement and Its Collision with Tenure in Higher Education: A Proposal for Statutory Repair, 24 S. CAL. INTERDISC. L.J. 369, 372 (2015) (discussing "the difficulty of removing a tenured professor for poor performance"); David M. Rabban, The Regrettable Underenforcement of

diminishing mental capacities have been raised with respect to judges,⁷ lawyers,⁸ and federal officials,⁹ and, in truth, they are relevant to all professions.

This Article addresses the accelerating problem of cognitive decline among employees. This phenomenon can impact not only workplace productivity and morale but also public safety. It requires careful attention from workplace experts and legal scholars. This Article strives to treat the subject in a balanced way, considering the interests and challenges faced by all stakeholders: employers, workers, professional associations, and the public.

Older workers generally bring a wealth of experience and highly refined skills to their jobs. ¹⁰ They can therefore add great strength to the workforce. They can also mentor, advise, and serve as role models for others. ¹¹

Yet cognitive decline will increasingly become a concern in workplaces of all types and sizes because of three intersecting trends. First, the American population is aging. ¹² In 2019, 16.5 percent of the population, or fifty-four million people, were age sixty-five and over. ¹³ "Baby boomers," defined as those born between 1946 and 1964, began turning sixty-five in 2011. ¹⁴ The sixty-five and older population is projected to expand to seventy-seven million by 2034, and by 2030, this population will constitute 21 percent of all United States

Incompetence as Cause to Dismiss Tenured Faculty, 91 IND. L.J. 39, 39 (2015) ("Universities are extremely reluctant to dismiss tenured professors for incompetence.").

^{7.} Francis X. Shen, *Aging Judges*, 81 Ohio St. L.J. 235, 257–59 (2020) (discussing concerns about the cognitive abilities of judges).

^{8.} David L. Hudson Jr., Lawyers and Cognitive Decline: Diminished Capacity May Bring Ethics Problems for Sufferers, Am. BAR ASS'N J. (Sept. 1, 2018, 2:05 AM), https://www.abajournal.com/magazine/article/lawyers_and_cognitive_decline_diminished_capacity_may_bring_ethics_problems.

^{9.} Jalayne J. Arias et al., Legal and Policy Challenges to Addressing Cognitive Impairment in Federal Officials, 76 JAMA NEUROLOGY 392, 392–93 (2019).

^{10.} Anothai Soonsawat et al., Cognitively Impaired Physicians: How Do We Detect Them? How Do We Assist Them?, 26 Am. J. GERIATRIC PSYCHIATRY 631, 632 (2018).

^{11.} Grant Freeland, Older Workers Deserve Your Company's Love Too, FORBES (Feb. 10, 2020, 7:20 AM), https://www.forbes.com/sites/grantfreeland/2020/02/10/older-workers-deserve-your-companys-love-too/?sh=3983eb8d3b2a.

^{12.} Share of Old Age Population (65 Years and Older) in the Total U.S. Population from 1950 to 2050, STATISTA (Oct. 28, 2021), https://www.statista.com/statistics/457822/share-of-old-age-population-in-the-total-us-population/ [hereinafter Share of Old Age Population]. See generally Older Population and Aging, U.S. CENSUS BUREAU, https://www.census.gov/topics/population/olderaging.html (last visited Feb. 13, 2022).

^{13.} Share of Old Age Population, supra note 12.

^{14.} Jeff Hoyt, *The Baby Boomer Generation*, SENIORLIVING.ORG (Aug. 19, 2021), https://www.seniorliving.org/life/baby-boomers/.

residents.¹⁵ Thus, more of America's workers will be older than in prior generations.

As people age, they are more likely to develop dementia.¹⁶ The risk of Alzheimer's disease doubles every five years after age sixty-five,¹⁷ and among people who are eighty-five or older, 32 percent have Alzheimer's dementia.¹⁸ The COVID-19 pandemic might make matters worse. Researchers have found that many survivors of COVID-19 have long-term cognitive problems.¹⁹ They worry that such patients are at an increased risk of developing Alzheimer's disease in the future.²⁰

The second trend is that many individuals are postponing retirement and prolonging their working lives.²¹ For example, about a quarter of physicians are over sixty-five,²² as are 15 percent of attorneys.²³ The average age of federal judges is sixty-nine.²⁴

^{15.} The U.S. Joins Other Countries with Large Aging Populations, U.S. Census Bureau (Oct. 8, 2019), https://www.census.gov/library/stories/2018/03/graying-america.html.

^{16.} See infra notes 48-49 and accompanying text.

^{17.} Causes and Risk Factors for Alzheimer's Disease, Alzheimer's Ass'n, https://www.alz.org/alzheimers-dementia/what-is-alzheimers/causes-and-risk-factors (last visited Mar. 1, 2022).

^{18.} Alzheimer's Ass'n, 2020 Alzheimer's Disease Facts and Figures, 16 Alzheimer's & Dementia 391, 398 (2020).

^{19.} Jon Hamilton, *Doctors Worry That Memory Problems After COVID-19 May Set the Stage for Alzheimer's*, NPR (July 26, 2021, 5:00 AM), https://www.npr.org/sections/health-shots/2021/07/26/1019875347/doctors-worry-that-memory-problems-after-covid-19-may-set-stage-for-alzheimers?origin= NOTIFY.

^{20.} Id.

^{21.} Harriet Edleson, More Americans Working Past 65, AARP (Apr. 22, 2019), https://www.aarp.org/work/employers/info-2019/americans-working-past-65.html; Richard McGahey, America Needs An Older Workers' Bureau, FORBES (June 11, 2021, 6:00 AM), https://www.forbes.com/sites/richardmcgahey/2021/06/ 11/america-needs-an-older-workers-bureau/?sh=5a20ab4d1179 ("Workers over 65 have the highest projected labor force growth rate of any age group."); Stephen Miller, COVID-19 Upends Retirement Expectations Across Generations, Soc'y for HUM. RES. MGMT. (June 4, 2020). https://www.shrm.org/resourcesandtools/hrtopics/benefits/pages/coronavirus-upends-retirement-expectations-generations .aspx ("Many were planning to work longer than previous generations, even before the pandemic "); Andrew Van Dam, A Record Number of Folks Age 85 and Older Are Working, Here's What They're Doing, WASH, Post (July 5, 2018), https://www.washingtonpost.com/news/wonk/wp/2018/07/05/a-record-number-offolks-age-85-and-older-are-working-heres-what-theyre-doing/ ("Labor Department figures show that at every year of age above 55, U.S. residents are working or looking for work at the highest rates on record.").

^{22.} Powell, supra note 5, at 3.

^{23.} Am. Bar Ass'n, ABA Profile of the Legal Profession 2020, at 35 (2020), https://www.americanbar.org/content/dam/aba/administrative/news/2020/07/potlp2020.pdf.

^{24.} Shen, *supra* note 7, at 237.

Third, emerging technologies enable clinicians to detect potential signs of dementia even before symptoms emerge.²⁵ These include positron emission tomography ("PET") scans, spinal taps, blood tests, and genetic tests.²⁶ Employers may well be tempted to utilize these tools for the purposes of making employment decisions.

Cognitive decline can cause a multitude of complex challenges in the workplace.²⁷ These raise a host of questions. How can employers detect deficits before the worker at issue causes any harm? How can employers determine if employees with cognitive decline can continue performing their job duties and which accommodations might help them do so? How should employers approach sensitive conversations with employees about cognitive decline? At what point should employees who are aware that they are experiencing cognitive deficits discuss their circumstances with their employers? How might such employees protect themselves from unlawful discrimination? Are there any practices and policies that employers should implement in order to detect and address cognitive decline in the workforce?

Cognitive decline is different from most other disabilities. Employees themselves may not recognize that they have developed cognitive deficits or seek confirmation from a physician.²⁸ Cognitive impairments are often slow to progress, making it challenging for workers to discern when these deficits affect their job performance and for employers to determine when intervention is appropriate.²⁹ Conversations about potential cognitive decline can also be far more sensitive and uncomfortable than conversations about obvious physical disabilities, and they can be especially difficult with veteran employees who have performed well for many years.³⁰

Little data exist as to how employers are actually addressing cognitive decline in the workplace.³¹ It is unclear if employers are appropriately accommodating employees with cognitive decline, are discharging them under pretexts such as budgetary constraints, or

^{25.} See infra Subpart I.C.

^{26.} See infra Subpart I.C.

^{27.} Carole Fleck, Coping with Cognitive Declines at Work, SOCY FOR HUM. RES. MGMT. (Sept. 3, 2015), https://www.shrm.org/hr-today/news/hr-magazine/pages/coping-with-cognitive-declines-at-work.aspx.

^{28.} See infra notes 55–57 and accompanying text.

^{29.} See infra notes 59–63 and accompanying text (describing the stages of dementia and the variable rate at which each stage is reached).

^{30.} See Fleck, supra note 27 (identifying potential steps human resources professionals can take to assist employees with cognitive decline, while noting that most steps are "daunting").

^{31.} Fabiola Silvaggi et al., Keeping People with Dementia or Mild Cognitive Impairment in Employment: A Literature Review on Its Determinants, 17 INT'L J. ENV'T RSCH. & PUB. HEALTH 842, 849 (2020) ("This review points out, as a first result, the paucity of literature addressing the work ability and factors associated with job loss in people with [early onset dementias], along with the absence of studies addressing the same issues in people with [mild cognitive impairment].").

are retaining them to the possible detriment of patients, clients, or customers.³²

This Article proceeds as follows. Part I discusses cognitive decline, traditional cognitive testing, and the emerging technologies that enable clinicians to detect or predict potential cognitive decline. Part II assesses the concerns that cognitive decline raises in the workplace, focusing on attorneys, judges, and physicians by way of illustration. Part III explains relevant provisions of the federal antidiscrimination statutes: the Age Discrimination in Employment Act ("ADEA"),³³ the Americans with Disabilities Act ("ADA"),³⁴ and the disparate impact theory under Title VII of the Civil Rights Act of 1964 ("Title VII").³⁵

Part IV analyzes these laws to determine what guidance they provide regarding employers' treatment of workers with cognitive decline. It considers a variety of policies that employers might implement. Part IV argues that employers cannot establish mandatory retirement ages absent legislation that permits doing so in particular job categories and that employers are prohibited from requiring cognitive testing beginning at specific ages. The Article further argues against requiring all employees to undergo periodic cognitive testing. This Part also posits that conducting testing such as PET scans or blood tests before any performance problems are evident would be legally and ethically impermissible.

Part IV next turns to the interventions that employers should implement. Performance problems stemming from cognitive decline should be treated like job concerns arising from other causes and should be assessed on a case-by-case basis. If workers exhibit actual job performance difficulties that suggest cognitive deficits, employers can require them to consult healthcare providers about testing. Workers with cognitive disabilities are entitled to reasonable accommodations, and employers must engage with employees to identify appropriate solutions. At the same time, employers have a right and often a responsibility to terminate employees who cannot perform their jobs effectively and safely even with accommodations.

Part V argues for two modifications to the ADA that are necessitated by new cognitive testing technologies. First, the statute should be revised to prohibit discrimination based on predictions of future illness. Second, it should prohibit employers from conducting preemployment testing that is not job-related.

Part VI develops recommendations for employers, employees, and professional associations. It is vital for all sectors to confront the possibility of cognitive decline and to take appropriate action. Identifying cognitive decline and responding appropriately to it can

33. 29 U.S.C. §§ 621–634.

^{32.} See id.

^{34. 42} U.S.C. §§ 12101–12117.

^{35. 42} U.S.C. § 2000e-2.

protect workers, employers, and the people they serve. Communicating openly and crafting reasonable accommodations may well enable individuals to work longer and shield employers and employees from liability associated with job performance deficiencies. Among the suggestions that Part VI offers are training for managers and supervisors about dementia, inclusion of optional cognitive testing and dementia education in workplace wellness programs, and involvement of professional associations in developing guidance and support mechanisms. A brief conclusion follows.

I. COGNITIVE DECLINE

Cognitive decline is a complex condition that is often difficult to detect. This Part provides background information about normal aging, cognitive deterioration, and dementia. It also discusses various ways to test for cognitive decline.

A. Cognitive Decline Facts and Figures

Human brains change as they age.³⁶ They generally shrink in volume and lose white matter integrity.³⁷ These alterations can impair abilities such as quantitative reasoning, perception speed, learning, multitasking, planning, and decision-making.³⁸ By contrast, vocabulary and language skills normally do not weaken with age.³⁹

Aging is typically associated with memory lapses, but not all types of memory deteriorate as people get older.⁴⁰ Semantic memory "refers to general knowledge about the world, including concepts, facts, and beliefs," and it does not ordinarily diminish.⁴¹ By contrast,

^{36.} Huan Liu et al., Aging of Cerebral White Matter, 34 AGEING RSCH. REVS. 64, 65 (2017); Ruth Peters, Ageing and the Brain, 82 POSTGRADUATE MED. J. 84, 84–85 (2006).

^{37.} Liu et al., *supra* note 36, at 66; Peters, *supra* note 36, at 84 ("[T]he volume of the brain and/or its weight declines with age at a rate of around 5% per decade after age 40 with the actual rate of decline possibly increasing with age particularly over age 70."); Shen, *supra* note 7, at 253–54 (explaining that reduction in white matter integrity means "[d]isruptions in brain network connectivity").

^{38.} *Memory and Aging*, Am. PSYCH. ASS'N, https://www.apa.org/pi/aging/memory-and-aging.pdf (last visited Feb. 13, 2022); Liu et al., *supra* note 36, at 66; Shen, *supra* note 7, at 254.

^{39.} How the Aging Brain Affects Thinking, NAT'L INST. ON AGING, https://www.nia.nih.gov/health/how-aging-brain-affects-thinking (last updated Oct. 19, 2020).

^{40.} See Memory and Aging, supra note 38.

^{41.} *Id.*; Eiling Yee et al., *Semantic Memory*, in 1 THE OXFORD HANDBOOK OF COGNITIVE NEUROSCIENCE (Kevin N. Ochsner & Stephen Kosslyn eds., 2013), https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199988693.001.0 001/oxfordhb-9780199988693-e-023?print=pdf.

episodic memory, which refers to the ability to store information "with 'mental tags' about where, when and how the information was picked up," does commonly decline.⁴²

Different people age differently.⁴³ In general, aging trajectories fall into four categories.⁴⁴ When cognitive ability is compared to functioning at the age of thirty-five, older individuals may demonstrate:

- Super aging, in which there is little to no cognitive decline, and mental faculties remain highly functioning even in later ages;
- Normal aging, in which there is some decline in cognitive performance, but not so much that it affects daily activity;
- *Mild cognitive impairment*, in which there is accelerated cognitive decline, but not rising to the level of significantly affecting daily life; and
- Pathologic aging or dementia, in which there is accelerated cognitive decline that does impair daily functioning.⁴⁵

Approximately 20 to 25 percent of seniors have mild cognitive impairment ("MCI"). 46 About 15 percent of MCI cases progress to dementia. 47

As of 2021, 6.2 million Americans who were sixty-five or older (over 11 percent of seniors) were afflicted with Alzheimer's dementia.⁴⁸ The prevalence of the disease varies by age. According to the Alzheimer's Association, 1.72 million people between the ages of sixty-five and seventy-four have the disease, as do 2.25 million people between the ages of seventy-five and eighty-four, and 2.27 million people who are eighty-five and older.⁴⁹

45. Id. at 251-52.

^{42.} Peters, supra note 36, at 85; Memory and Aging, supra note 38.

^{43.} Shen, *supra* note 7, at 251.

^{44.} *Id*.

^{46.} Judith Graham, Research Shows That the Prevalence of Dementia Has Fallen in the United States, WASH. POST (June 16, 2018), https://www.washington.post.com/national/health-science/research-shows-that-the-prevalence-of-dementia-has-fallen-in-the-united-states/2018/06/15/636d61ac-6fd1-11e8-bf86-a2351b5ece99_story.html.

^{47.} Harvard Med. Sch., Staving off Dementia When You Have Mild Cognitive Impairment, HARV. HEALTH PUBL'G (Mar. 30, 2021), https://www.health.harvard.edu/staying-healthy/staving-off-dementia-when-you-have-mild-cognitive-impairment.

^{48.} Alzheimer's Ass'n, 2021 Alzheimer's Disease Facts and Figures, 17 Alzheimer's & Dementia 1, 19 (2021), https://www.alz.org/media/documents/alzheimers-facts-and-figures.pdf.

^{49.} Id.

Moreover, Alzheimer's disease accounts for only 60 to 80 percent of dementia cases.⁵⁰ Many people suffer from dementia caused by other conditions, such as cerebrovascular disease, Lewy body disease, frontotemporal lobar degeneration ("FTLD"), and Parkinson's disease.⁵¹

Some people develop dementia even before the age of sixty-five.⁵² For example, 60 percent of individuals with FTLD are forty-five to sixty years old.⁵³ Others develop early onset Alzheimer's disease, though exact figures about the younger demographic are unavailable.⁵⁴

The Mayo Clinic lists the following as signs and symptoms of dementia:

Cognitive changes

- Memory loss, which is usually noticed by someone else
- Difficulty communicating or finding words
- Difficulty with visual and spatial abilities, such as getting lost while driving
- Difficulty reasoning or problem-solving
- Difficulty handling complex tasks
- Difficulty with planning and organizing
- Difficulty with coordination and motor functions
- Confusion and disorientation

Psychological changes

- Personality changes
- Depression
- Anxiety
- Inappropriate behavior
- Paranoia
- Agitation
- Hallucinations⁵⁵

According to the Centers for Disease Control and Prevention, fewer than half of people with dementia receive a diagnosis from a

^{50.} Id. at 6.

^{51.} Id. at 6-7.

^{52.} *Id.* at 19.

^{53.} Id. at 6.

^{54.} Silvaggi et al., *supra* note 31, at 842 ("Approximately 10–20% of people with early onset dementias (EOD) or mild cognitive impairment (MCI) are aged under 65...."); *Younger/Early-Onset Alzheimer's*, Alzheimer's Ass'n, https://www.alz.org/alzheimers-dementia/what-is-alzheimers/younger-early-onset (last visited Feb. 13, 2022).

^{55.} Dementia, MAYO CLINIC (June 17, 2021), https://www.mayoclinic.org/diseases-conditions/dementia/symptoms-causes/syc-20352013.

physician.⁵⁶ In fact, more than 50 percent of people who are worried about changes in their cognitive abilities do not share their concerns with healthcare providers.⁵⁷ Among those who are diagnosed with dementia, only 35 percent understand that they have the condition.⁵⁸

Dementia progresses along a continuum of phases. The well-established Global Deterioration Scale describes seven stages for assessing primary degenerative dementia.⁵⁹ They are: (1) no cognitive decline, (2) very mild cognitive decline, (3) mild cognitive decline, (4) moderate cognitive decline, (5) moderately severe cognitive decline, (6) severe cognitive decline, and (7) very severe cognitive decline.⁶⁰ Other experts identify three to five stages of dementia progression.⁶¹

Alzheimer's disease advances at variable rates.⁶² On average, following diagnosis, patients live between three and eleven years, but some survive for over twenty years.⁶³ Many are able to continue working, especially in the early stages of the illness.⁶⁴

Some instances of cognitive decline are caused by medical conditions that are treatable.⁶⁵ Some examples include thyroid problems, drug side effects, and vitamin deficiencies.⁶⁶ In these cases, cognitive deficits may significantly diminish or disappear after medical intervention.⁶⁷

^{56.} Advancing Early Detection, CTRS. FOR DISEASE CONTROL & PREVENTION (Feb. 4, 2019), https://www.cdc.gov/aging/healthybrain/issue-maps/early-detection.html.

^{57.} Id.

^{58.} *Id*.

^{59.} Barry Reisberg, Global Deterioration Scale, GERIATRIC RES. INC. (Sept. 14, 2005), https://geriatrictoolkit.missouri.edu/cog/Global-Deterioration-Scale.pdf.

^{60.} Id.

^{61.} See Stages of Alzheimer's, Alzheimer's Ass'n, https://www.alz.org/ alzheimers-dementia/stages (last visited Feb. 13, 2022) (describing three stages of Alzheimer's disease dementia: early, middle, and late); Alzheimer's Stages: Progresses, HowtheDiseaseMayo CLINIC (Apr. 29, 2021), https://www.mayoclinic.org/diseases-conditions/alzheimers-disease/indepth/alzheimers-stages/art-20048448 (describing five stages of Alzheimer's disease: preclinical Alzheimer's disease, mild cognitive impairment, mild dementia, moderate dementia, and severe dementia).

^{62.} Alzheimer's Stages: How the Disease Progresses, supra note 61.

⁶³ Id

^{64.} Silvaggi et al., *supra* note 31, at 849 ("[S]upport in the workplace may act as a facilitator in enabling patients' ability to carry out daily work tasks."); Fleck, *supra* note 27 ("The degree to which changes in cognitive function may impact workers' job performance varies.").

^{65.} Cognitive Testing, MEDLINEPLUS, https://medlineplus.gov/lab-tests/cognitive-testing/ (last visited Feb. 13, 2022).

^{66.} Id.

^{67.} Id.

A variety of factors may influence mental capacity in older age, including diet, exercise, childhood intelligence level, educational attainment, and engagement in intellectually stimulating activities. ⁶⁸ Thus, individuals may be able to take limited steps to prevent or slow brain function deterioration. ⁶⁹

B. Testing for Cognitive Decline

A large number of tools are available to assess cognitive capacities.⁷⁰ Some tools involve a few minutes of testing and are designed to identify individuals who would benefit from more comprehensive evaluations.⁷¹ The following are a few examples:

- The *Mini-Cog* takes two to four minutes and measures short-term recall and clock drawing.
- The *Memory Impairment Screen* ("MIS") takes four minutes and asks patients to place four words into four categories and then to say the words two or three minutes later.
- The General Practitioner Assessment of Cognition ("GPCOG") is a two- to five-minute test that includes recall and clock drawing, and, separately, a caregiver or family member interview about the patient's working memory, mental flexibility, and self-control.
- The *Montreal Cognitive Assessment* ("MoCA") takes ten to fifteen minutes and assesses ability to draw a clock, abstract thinking, mental flexibility, working memory, and self-control.
- The Saint Louis University Mental Status ("SLUMS") is an eleven-item test that takes seven minutes and includes clock drawing, recognition of figures, and other exercises to measure orientation, attention, and shortterm memory.
- The *Mini-Mental State Examination* ("MMSE") is a tenminute test that "assesses orientation, word recall, attention, and visuospatial thinking."⁷²

^{68.} Yuko Hara, Seven Lifestyle Interventions Evaluated by the WHO for Preventing Cognitive Decline and Dementia, Cognitive Vitality (Aug. 14, 2019), https://www.alzdiscovery.org/cognitive-vitality/blog/seven-lifestyle-interventions-evaluated-by-who-prevent-cognitive-decline; Peters, supra note 36, at 86.

^{69.} See Harvard Med. Sch., supra note 47.

^{70.} José Wagner Leonel Tavares-Júnior et al., Cognitive Assessment Tools for Screening Older Adults with Low Levels of Education: A Critical Review, 10 FRONTIERS IN PSYCH. 1, 2–3 (2019).

^{71.} See CTRS FOR MEDICARE & MEDICAID SERVS., COGNITIVE ASSESSMENT TOOLS 2–3 (2017).

^{72.} *Id.* at 3–6. Clock drawing is useful because it measures visual and spatial problems that early dementia patients commonly have and that they demonstrate by spacing numbers on the clock incorrectly. *Id.* at 3. Working

Various organizations offer self-assessment tools that individuals can use on their own to determine whether to seek medical attention. These include the Self-Administered Gerocognitive Exam,⁷³ an athome version of the MMSE,⁷⁴ brief questionnaires offered by Psycom⁷⁵ and AARP,⁷⁶ and more.⁷⁷

Brief cognitive assessments can yield false positives or negatives.⁷⁸ One study focused on the MMSE, MIS, and an animal-naming test and involved 824 individuals who took all three tests.⁷⁹ The study found that 35.7 percent were misclassified by at least one assessment, 13.4 percent were misclassified by at least two assessments, and 1.7 percent were misclassified by all three.⁸⁰ Thus, follow-up is required for those with positive results or persistent concerns.

Thorough neuropsychological testing takes several hours and is considerably more reliable than brief assessments.⁸¹ Testing typically involves a combination of some or all of the following:

memory is short-term memory that enables people to accomplish tasks such as purchasing the correct items at a store. *Id.* at 4. Mental flexibility enables individuals to change what they think about, moving from one matter to another. *Id.*

^{73.} Alissa Sauer, Self-Administered Gerocognitive Examination Promises to Detect Alzheimer's, Alzheimers.net/ (Oct. 30, 2017), https://www.alzheimers.net/ 1-28-15-SAGE-alzheimers-examination.

^{74.} Online, At-Home & Clinical Tests for Alzheimer's, Dementia & Aging-Related Mental Decline, Dementia Care Cent. (Oct. 12, 2020) [hereinafter Online, At-Home & Clinical Tests], https://www.dementiacarecentral.com/alzheimers-online-test/.

^{75.} Randy Bressler, *Dementia Test (Self-Assessment)*, PSYCOM (Nov. 8, 2021), https://www.psycom.net/dementia-test.

^{76.} Elizabeth Agnvall & Andy Markowitz, Is It Normal Memory Loss or Early Dementia?, AARP (Nov. 12, 2021), https://www.aarp.org/health/brain-health/info-2015/normal-memory-loss-vs-dementia-quiz.html#quest1.

^{77.} Online, At-Home & Clinical Tests, supra note 74.

^{78.} Tresa M. Roebuck-Spencer et al., Cognitive Screening Tests Versus Comprehensive Neuropsychological Test Batteries: A National Academy of Neuropsychology Education Paper, 32 Archives Clinical Neuropsych. 491, 493–94 (2017); Jenna Payesko, Study Finds Misclassification of Dementia by Brief Cognitive Assessments, NeurologyLive (Dec. 6, 2018), https://www.neurologylive.com/view/study-finds-misclassification-dementia-brief-cognitive-assessments.

^{79.} Payesko, *supra* note 78.

^{80.} *Id*.

^{81.} Roebuck-Spencer et al., *supra* note 78, at 494–95; Ryan W. Schroeder et al., *Neuropsychological Evaluations in Adults*, 99 Am. Fam. Physician 101, 101 (2019); *Neuropsychological Testing and Assessment*, Cleveland Clinic (Oct. 15, 2020), https://my.clevelandclinic.org/health/diagnostics/4893-neuropsychological-testing-assessment (stating that two to four hours is the typical length of neuropsychological testing, though exams can take anywhere from one to eight hours).

writing, drawing, answering questions, solving puzzles, and completing exercises on a computer.⁸²

C. Testing for Alzheimer's Disease Biomarkers

Traditionally, a reliable Alzheimer's disease diagnosis could be made only after the patient's death through an autopsy.⁸³ Now, new technologies make it possible to measure certain biomarkers⁸⁴ to determine whether individuals are at high risk of developing dementia.

Scientists have discovered that brain imaging and spinal fluid tests can detect signs of Alzheimer's disease up to twenty years before symptoms manifest.⁸⁵ This is because Alzheimer's disease has particular biomarkers, as described in the following text:

Alzheimer's disease is characterized by two pathological changes in the brain tissue. One is a protein called tau while the other involves the amyloid beta peptide. Both can form clumps of aggregates that progressively accumulate in specific areas of the brain. For tau, individual units of the protein can aggregate into finely-ordered fibrillar structures facilitated by a biochemical process called phosphorylation. Throughout the disease process, amyloid beta and phosphorylated tau (p-tau) are released from the brain into cerebrospinal fluid; the amount of the released proteins are [sic] used as reliable surrogate markers for clinical diagnoses of Alzheimer's disease. 86

Brain imaging with PET scans, however, is expensive and rarely utilized.⁸⁷ Likewise, testing cerebrospinal fluid requires a lumbar puncture, which is an uncommon and costly procedure.⁸⁸

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^{82.} Schroeder et al., supra note 81, at 101; Neuropsychological Testing and Assessment, supra note 81.

^{83.} Esther Landhuis, *Detecting Alzheimer's Gets Easier with a Simple Blood Test*, Sci. Am. (Feb. 4, 2021), https://www.scientificamerican.com/article/detecting-alzheimers-gets-easier-with-a-simple-blood-test/.

^{84. &}quot;[A] biomarker is a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes or pharmacological responses to a therapeutic intervention." Ananya Mandal, *What is a Biomarker?*, NEWS MED. LIFE SCI. (Feb. 26, 2019), https://www.news-medical.net/health/What-is-a-Biomarker.aspx.

^{85.} Landhuis, supra note 83; Ron Brookmeyer et al., Forecasting the Prevalence of Preclinical and Clinical Alzheimer's Disease in the United States, 14 Alzheimer's & Dementia 121, 121 (2018); Matthew W. Lawrence & Jalayne J. Arias, Alzheimer's Disease Biomarkers: Another Tool for FAA Pilot Screening?, 6 J.L. & BIOSCIENCES 85, 87 (2019).

^{86.} University of Gothenburg, New Tests Identify Early Changes in Alzheimer's Disease Before Symptoms Appear, ScienceDaily (Dec. 1, 2020), https://www.sciencedaily.com/releases/2020/12/201203937.htm.

^{87.} Ian Fyfe, Tau Species Has Potential for Alzheimer Disease Blood Test, 16 NATURE REVS. NEUROLOGY 521, 521 (2020).

^{88.} *Id*.

Moreover, PET scans and spinal taps do not provide any certainty about a person's future mental status. The presence of biomarkers in asymptomatic people indicates that they are at increased risk of Alzheimer's disease but does not definitively predict that the disease will develop.⁸⁹

A new medical advance could make testing for biomarkers much more common and accessible. In 2020, a blood test developed by C_2N Diagnostics that measures beta-amyloid protein buildup became commercially available. The blood test, called PrecivityAD, is designed for individuals who have early signs of cognitive impairment and are sixty to ninety-one years old. Urrently, it is not covered by insurance or Medicare, but it costs \$1,250, which is far less expensive than a PET scan's price tag of approximately \$5,000.92

At the same time, Swedish researchers announced that they have developed a blood test that can "detect elevated levels of the tau protein as early as five years before" a patient exhibits Alzheimer's disease symptoms.⁹³ As detecting disease biomarkers becomes easier and cheaper, employers may well be tempted to try to identify applicants and employees who are at the very earliest stages of cognitive decline or who are at risk of developing Alzheimer's disease in the future.

Blood tests can also be used to assess an individual's genetic makeup and to identify genetic variations that are associated with Alzheimer's disease. Three genetic mutations are linked to early onset Alzheimer's disease: Amyloid precursor protein ("APP") on chromosome 21, Presenilin 1 ("PSEN1") on chromosome 14, and Presenilin 2 ("PSEN2") on chromosome 1.95 The APOE £4 allele96 increases a person's chance of developing Alzheimer's disease and has

^{89.} Brookmeyer et al., *supra* note 85, at 127; Lawrence & Arias, *supra* note 85, at 87.

^{90.} Lindsay Carlton, *Alzheimer's Blood Test Available for Purchase, But Not Yet FDA-Approved*, Verywell Health (Dec. 7, 2020), https://www.verywell health.com/first-blood-test-alzheimers-available-for-purchase-5090151 (indicating that the Food and Drug Administration has not yet approved the test); Landhuis, *supra* note 83.

^{91.} Landhuis, *supra* note 83.

^{92.} *Id.* (stating that according to C₂N, "a financial assistance program can bring out-of-pocket costs down to between \$25 and \$400 for eligible patients").

^{93.} Anne Lise Stranden, A Blood Test Can Detect Alzheimer's Five Years Before Symptoms Appear, SCIENCENORWAY.NO (Feb. 11, 2021), https://sciencenorway.no/ageing-alzheimers-dementia/a-blood-test-can-detect-alzheimers-five-years-before-symptoms-appear/1811843.

^{94.} Alzheimer's Disease Genetics Fact Sheet, NAT'L INST. ON AGING (Dec. 24, 2019), https://www.nia.nih.gov/health/alzheimers-disease-genetics-fact-sheet. 95. Id.

^{96. &}quot;An allele is one of two or more versions of a gene." *Allele*, NAT'L HUM. GENOME RSCH. INST., https://www.genome.gov/genetics-glossary/Allele (last visited Feb. 13, 2022).

also been linked to disease onset at an earlier age.⁹⁷ Other genetic variants are associated with late-onset Alzheimer's disease.⁹⁸

II. WORKPLACE CONCERNS

Cognitive decline has not escaped the attention of policymakers. Federal law explicitly establishes age limitations for workers in certain public safety jobs because of concern about the physical and mental abilities of older workers. 99 For example, the law requires air traffic controllers to retire at the age of fifty-six¹⁰⁰ and pilots to retire at the age of sixty-five. 101 Members of the Foreign Service must likewise retire at the age of sixty-five. 102 The vast majority of employers, however, must grapple with concerns about cognitive decline in the absence of mandatory retirement mandates. They must comply with antidiscrimination statutes, discussed in Part III, while also safeguarding work quality and workplace safety. 103 This is no easy task.

A multitude of factors may induce professionals to postpone retirement.¹⁰⁴ Older individuals can often maintain good physical

^{97.} Lawrence & Arias, supra note 85, at 97; Alzheimer's Disease Genetics Fact Sheet, supra note 94 (emphasizing that "[s]ome people with an APOE ϵ 4 allele never get the disease, and others who develop Alzheimer's do not have any APOE ϵ 4 alleles").

^{98.} Alzheimer's Genes: Are You at Risk?, MAYO CLINIC (May 6, 2021), https://www.mayoclinic.org/diseases-conditions/alzheimers-disease/indepth/alzheimers-genes/art-20046552.

^{99.} Mark R. Katlic & JoAnn Coleman, Balancing Safety with Dignity When Evaluating Aging Practitioners, Am. Assoc. Physician Leadership (Mar. 1, 2018), https://www.physicianleaders.org/news/balancing-safety-with-dignity-when-evaluating-aging-practitioners (listing the following mandatory retirement ages: "Federal Bureau of Investigation agent (57), National Park Ranger (57), air traffic controller (56), lighthouse operator (55), nuclear material couriers (57), and custom/border protection officers (57)").

^{100. 5} U.S.C. § 8335(a); Kate Bleckley, NAS (National Airspace System) Human Factors Safety Research Laboratory Controller Entry/Retirement Age, FED. AVIATION ADMIN. (Oct. 19, 2018, 12:19 PM), https://www.faa.gov/data_research/research/med_humanfacs/humanfactors/nas/age/.

^{101. 49} U.S.C. § 44729(a).

^{102. 22} U.S.C. § 4052(a)(1).

^{103.} See 42 U.S.C. § 12112(b)(5); see also 29 C.F.R. § 1630.2(r) (2021) (dictating that whether someone would pose a direct threat in the workplace is based on an individual assessment of medical evidence regarding the person's current abilities).

^{104.} See Robert J. Derocher, A Gentle Landing: LAPs, Bar Associations Help Lawyers with Age-Related Cognitive Impairment, Am. Bar Ass'n (2016), https://www.americanbar.org/groups/bar_services/publications/bar_leader/2015-16/may-june/a-gentle-landing/.

2022]

health until an advanced age. ¹⁰⁵ Some feel that they will lose their identity and sense of purpose once they stop working. ¹⁰⁶

Many also have inadequate retirement savings and feel that they must continue to work to pay their expenses. Twenty-five percent of working people who are sixty and older have no retirement savings or pensions whatsoever. One in three baby boomers have between and \$25,000 in retirement savings. Retirees need money not only for leisure activities but also for necessities, including healthcare. Fidelity Investments estimates that a sixty-five-year-old couple will need \$300,000 (in today's dollars) just to pay future medical expenses, such as deductibles, copayments, and the many costs that Medicare does not cover. 110

This Part focuses on three professions: legal practice, the judiciary, and medicine. Cognitive decline has garnered particular attention in all three fields, likely because of the competencies these professions require.

A. Attorneys

Legal ethics expert Professor Peter Joy has stated that "[l]awyers suffering cognitive decline is a growing problem." Attorneys with cognitive deficits might not be able to analyze their cases' strengths and weaknesses, formulate appropriate arguments, or understand opposing counsels' arguments. These problems, in turn, may lead to ethical misconduct, disciplinary measures, and legal malpractice claims. Italian

Attorneys have an ethical duty to be vigilant about their colleagues' job performance and to seek intervention when

106. Id.

^{105.} *Id*.

^{107.} Id.

^{108.} Bd. of Governors of the Fed. Rsrv., Report on the Economic Well-Being of U.S. Households in 2018, at 4 (2019).

^{109. 1} in 3 Americans Have Less than \$5,000 in Retirement Savings, Nw. Mut. (May 8, 2018), https://news.northwesternmutual.com/2018-05-08-1-In-3-Americans-Have-Less-Than-5-000-In-Retirement-Savings.

^{110.} How to Plan for Rising Health Care Costs, FIDELITY (Aug. 31, 2021), https://www.fidelity.com/viewpoints/personal-finance/plan-for-rising-health-care-costs. Medicare does not pay for most dental, vision, and hearing care, which can be very expensive. Joy Victory, Medicare Coverage and Hearing Aids, HEALTHY HEARING (Aug. 2, 2021), https://www.healthyhearing.com/help/hearing-aids/medicare-cover. For example, a single hearing aid can cost between \$1,000 and \$6,000. Mandy Mroz, Hearing Aid Prices, HEALTHY HEARING (June 4, 2021), https://www.healthyhearing.com/help/hearing-aids/prices.

^{111.} Hudson, supra note 8.

^{112.} *Id*.

^{113.} Id.; Michael N. Widener, The Kindest Cut of All: Invoking Denny Crane, Ethical Standards and Intentional Words for Law Practice Transitions, 2018 U. ILL. L. REV. Online 242, 248–51 (2018).

necessary.¹¹⁴ The Model Rules of Professional Conduct establish that "[a] lawyer who knows that another lawyer has committed a violation of the Rules of Professional Conduct that raises a substantial question as to that lawyer's honesty, trustworthiness or fitness as a lawyer in other respects, shall inform the appropriate professional authority."¹¹⁵

In 2021, the American Bar Association Commission on Law and Aging and the American Psychological Association published the second edition of a resource entitled Assessment of Older Adults with Diminished Capacities. ¹¹⁶ It includes a "Capacity Worksheet" to help identify signs of diminished capacity. ¹¹⁷ While this tool is largely designed to help attorneys assess clients, it is also relevant to lawyers whose conduct or work raise concerns. The American Bar Association Commission on Lawyer Assistance Programs' 2014 "Working Paper on Cognitive Impairment and Cognitive Decline" stated that lawyers should develop a mental checklist of "red flags" that potentially indicate a colleague can no longer practice law competently. ¹¹⁸ Lawyer assistance programs often become active in helping legal employers assess cases of potential mental impairment and appropriate responses to them. ¹¹⁹

B. Judges

A growing number of commentators are sounding alarms regarding cognitive decline among judges.¹²⁰ They relate disquieting anecdotes about the job performance of sitting judges who have been diagnosed with Alzheimer's disease.¹²¹ For example, Cook County

116. See generally Am. Bar Ass'n Comm. on L. & Aging & Am. Psych. Ass'n, Assessment of Older Adults with Diminished Capacities (2d ed. 2021).

^{114.} MODEL RULES OF PRO. CONDUCT r. 8.3(a) (Am. BAR ASS'N 1983).

^{115.} Id.

^{117.} *Id.* at 33–39.

^{118.} Am. Bar Ass'n Comm. on Law. Assistance Programs Senior Law. Assistance Comm., Working Paper on Cognitive Impairment and Cognitive Decline 3 (Apr. 11, 2014), https://www.alabar.org/assets/2014/08/ALAP-Cognitive-Impairment-and-Decline-Intro-05-22-2015.pdf.

^{119.} Derocher, *supra* note 104; *see infra* notes 442–45 and accompanying text (providing further information about lawyer assistance programs).

^{120.} Gayatri Devi & Kirk R. Daffner, *Is Old Ever Too Old? Cognitively Impaired Politicians, Judges and Physicians*, Hill (Apr. 14, 2021, 9:30 AM), https://thehill.com/opinion/healthcare/547890-is-old-ever-too-old-cognitively-impaired-politicians-judges-and-physicians; Joseph Goldstein, *Life Tenure for Federal Judges Raises Issues of Senility, Dementia*, Propublica (Jan. 18, 2011, 7:30 AM), https://www.propublica.org/article/life-tenure-for-federal-judges-raises-issues-of-senility-dementia; Amanda Robert, *How Can Aging Judges Know When It's Time to Hang Up the Robe?*, Am. Bar Ass'n J. (Dec. 1, 2020, 3:30 AM), https://www.abajournal.com/magazine/article/knowing-when-its-time-to-hang-up-the-robe.

^{121.} Shen, *supra* note 7, at 282.

Judge Valarie Turner allowed her law clerk to wear a judicial robe and hear traffic cases before being dismissed for inability to fulfill her job duties because of Alzheimer's disease. As a second example, Judge Richard Owen, an eighty-four-year-old federal district court judge in New York, reportedly exhibited serious memory lapses and confusion during hearings and trials.

There is particular concern about federal judges, who have lifetime appointments.¹²⁴ Many older federal judges take senior status, which enables them to continue earning salaries and to work reduced workloads while remaining on the bench indefinitely.¹²⁵ Senior status is available to those who are at least sixty-five years old, who have served for a minimum of ten years, and whose age and years of service add up to the number eighty.¹²⁶

The Judicial Conduct and Disability Act of 1980 empowers members of the public to file complaints with the clerk of the appropriate United States Court of Appeals alleging that a federal judge is unable to perform his or her duties because of mental disability. The chief judge then determines whether the complaint warrants investigation by a special committee, the circuit's judicial council may take appropriate action. Special committees, however, are rarely convened, and it is even rarer for a judicial council to take formal action. Most often, concerns about federal judges' diminishing capacities are handled informally. These informal mechanisms include wellness committees that provide judges with education and counseling about cognitive decline and intervention from colleagues who try to persuade the individual

^{122.} *Id.*; Devi & Daffner, *supra* note 120; Debra Cassens Weiss, *Judge Who Allowed Law Clerk to Rule on Traffic Cases Is Forced to Retire After Alzheimer's Diagnosis*, Am. Bar Ass'n J. (Dec. 5, 2017, 2:21 PM), https://www.abajournal.com/news/article/judge_who_allowed_law_clerk_to_rule_on_traffic_cases_is_forced_to_retire_af.

^{123.} Goldstein, *supra* note 120 (reporting that Judge Owen seemed to forget what email was and appeared confused about the key facts in a case).

^{124.} Shen, *supra* note 7, at 239, 241.

^{125.} Id. at 242.

^{126.} *Id.* at 243.

^{127. 28} U.S.C. § 351(a); FAQs: Filing a Judicial Conduct or Disability Complaint Against a Federal Judge, U.S. CTS. (July 2021), https://www.uscourts.gov/judges-judgeships/judicial-conduct-disability/faqs-filing-judicial-conduct-ordisability-complaint.

^{128. 28} U.S.C. § 353(c).

^{129.} *Id.* §§ 354(a)(2)–(3).

^{130.} Arthur D. Hellman, An Unfinished Dialogue: Congress, the Judiciary, and the Rules for Federal Judicial Misconduct Proceedings, 32 GEO. J. LEGAL ETHICS 341, 375 (2019) ("The overwhelming majority of complaints are dismissed without the appointment of a special committee, and of the small number remaining, some are concluded based on corrective action.").

^{131.} Shen, *supra* note 7, at 267.

at issue to retire. Several efforts to legislate a mandatory retirement age for federal judges have failed. 33

Unlike federal judges, state judges are often elected.¹³⁴ Other state judges are appointed by governors for a set period of time, typically between four and fifteen years.¹³⁵ Thus, many state judges are subject to some level of periodic scrutiny from voters or governors. In addition, thirty-two states and the District of Columbia have mandatory judicial retirement ages, ranging from seventy to seventy-five.¹³⁶ While the average age of federal judges is 69, researchers have estimated that the average age of state judges is 59.6.¹³⁷

C. Physicians

There is significant concern about cognitive decline in the physician workforce as well. ¹³⁸ Dr. Tia Powell, a leading psychiatrist and bioethicist, warns of a "looming public health crisis of aging physicians." ¹³⁹ Other experts estimate that as many as 28 percent of physicians aged seventy and older who have active licenses currently have mild cognitive impairment or dementia. ¹⁴⁰ The American College of Surgeons issued a "Statement on the Aging Surgeon" in 2016 that urged surgeons to "voluntarily assess their neurocognitive function using confidential online tools" and to disclose any worrisome findings to their workplaces. ¹⁴¹

A well-known 2018 article published in the *American Journal of Geriatric Psychiatry* is entitled "Cognitively Impaired Physicians: How Do We Detect Them? How Do We Assist Them?" The authors

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^{132.} *Id.* at 267–74 (describing both real-life instances of colleagues persuading fellow judges to retire and wellness programs instituted by various circuits); Robert, *supra* note 120.

^{133.} Shen, *supra* note 7, at 278–80.

^{134.} Judicial Selection: Significant Figures, Brennan Ctr. for Just. (Oct. 4, 2021), https://www.brennancenter.org/our-work/research-reports/judicial-selection-significant-figures.

^{135.} Inst. for the Advancement of the Am. Legal Sys., FAQs: Judges in the United States 6, https://iaals.du.edu/sites/default/files/documents/publications/judge_faq.pdf (last visited Feb. 13, 2022) (explaining that in many states, judges serve a short (e.g., one- to three-year) initial term before being reappointed for a full term); *Judicial Selection: Significant Figures, supra* note 134.

^{136.} Shen, *supra* note 7, at 275.

^{137.} Id. at 237, 245.

^{138.} Powell, supra note 5, at 3; Katlic & Coleman, supra note 99.

^{139.} Powell, supra note 5, at 3.

^{140.} Erica Carbajal, Viewpoint: 5 Strategies to Address Cognitive Impairment Among Aging Physicians, Becker's Hosp. Rev. (Apr. 21, 2021), https://www.beckershospitalreview.com/hospital-physician-relationships/viewpoint-5-strategies-to-address-cognitive-impairment-among-aging-physicians.html.

^{141.} Statement on the Aging Surgeon, AM. COLL. OF SURGEONS (Jan. 1, 2016), https://www.facs.org/about-acs/statements/80-aging-surgeon.

^{142.} See generally Soonsawat et al., supra note 10.

noted that older physicians benefit from their many years of experience. But the writers also stress that "[a]ging affects multiple domains of cognitive functioning relevant to physicians' professional performance." The authors discuss several studies that found that older doctors have less successful treatment outcomes than younger clinicians. 145

Some medical employers have undertaken initiatives to address concerns about the job performance of aging healthcare providers. Yale New Haven Hospital decided to require healthcare providers who were seventy or older and sought reappointment to its medical staff to undergo a neuropsychological assessment. From October 2016 through January 2019, the hospital tested 141 clinicians. All of these, eighteen (12.7 percent) were found to have cognitive deficits that were likely to impair their job performance. All of the individuals chose to leave their practice or to move "into a closely proctored environment." However, the Equal Employment Opportunity Commission ("EEOC") has sued Yale New Haven Hospital in federal court for age and disability discrimination because of its testing policy. The EEOC is the federal agency that enforces the federal employment discrimination laws.

Hartford HealthCare implemented a very similar "Late Career Practitioner Policy" for its hospitals.¹⁵² Beginning at age seventy, clinicians are subject to an annual reappointment process (rather than a biannual one), which includes a medical exam, vision exam, neuropsychological testing, and performance evaluations.¹⁵³ A

^{143.} Id. at 632.

^{144.} *Id*.

^{145.} Id. at 633.

^{146.} Cooney & Balcezak, *supra* note 5, at 179.

^{147.} *Id.* at 180. The individuals included 125 physicians, "5 advanced practice registered nurses, 4 dentists, 3 psychologists, 2 podiatrists, 1 physician associate, and 1 midwife." *Id.*

^{148.} *Id*.

^{149.} *Id*.

^{150.} See generally Complaint, Equal Emp. Opportunity Comm'n v. Yale New Haven Hosp., No. 3:20-cv-187 (D. Conn. Feb. 11, 2020), https://www.wtnh.com/wp-content/uploads/sites/100/2020/02/yale-new-haven-hospital-eeoc-lawsuit.pdf. See *infra* Subparts III.A and III.B for discussion of the Age Discrimination in Employment Act and Americans with Disabilities Act.

^{151.} What Laws Does EEOC Enforce?, U.S. EQUAL EMP. OPPORTUNITY COMM'N, https://www.eeoc.gov/youth/what-laws-does-eeoc-enforce (last visited Feb. 13, 2022).

^{152.} Late Career Practitioner Policy, HARTFORD HEALTHCARE, https://hartfordhospital.org/file%20library/policies/late-career-practitioner-policy.pdf (last visited Feb. 13, 2022).

^{153.} *Id*.

variety of other institutions across the country have established latecareer practitioner policies as well, though their details vary.¹⁵⁴

Some efforts to mandate cognitive testing for older physicians were short-lived. Stanford abandoned its cognitive testing requirement in 2012 in response to lobbying by its physicians but retained physical testing and peer review beginning at age 74.5. ¹⁵⁵ In 2014, Utah's Intermountain Healthcare established a cognitive testing requirement for physicians over age 70, but the state legislature outlawed this requirement in 2018. ¹⁵⁶ Utah now prohibits employers from requiring physicians to undergo cognitive testing after a certain age unless the testing meets a stringent set of ten requirements. ¹⁵⁷ One of these is that the screening must be "based on evidence of cognitive changes associated with aging that are relevant to physician performance." ¹⁵⁸ This language seemingly precludes testing programs that apply to all older physicians regardless of job performance.

It is also noteworthy that in 2018, the American Medical Association ("AMA") proposed eight guiding principles "as a basis for developing guidelines for the screening and assessment of senior/later career physicians." The AMA opposed "written examination[s] of cognitive ability, except in those instances when information collected by a licensing board indicates need for such an examination." Nevertheless, the proposal was voted down in large part because of concerns about ageism. 161

156. Lola Butcher, *Doctors Are Suing over Age-Based Screening Requirements*, QUARTZ (June 25, 2020), https://qz.com/1872984/doctors-are-suing-over-age-based-screening-requirements/; Ben Lockhart, *Bill Advances That Would Prohibit Certain Doctor Competency Tests*, DESERET NEWS (Feb. 26, 2018, 3:30 PM), https://www.deseret.com/2018/2/26/20640683/bill-advances-that-would-prohibit-certain-doctor-competency-tests.

^{154.} Katlic & Coleman, *supra* note 99. They include: the Arkansas Children's Hospital, Cooper University Hospital in New Jersey, LifeBridge Health System's Sinai Hospital, Maryland's Northwest Hospital, the University of Pittsburgh Medical Center, the University of Pennsylvania, Temple University in Philadelphia, and Virtua Health in New Jersey. *Id*.

^{155.} *Id*.

^{157.} UTAH CODE ANN. § 58-67-302(5)(b) (West 2020).

^{158.} *Id.* § 58-67-302(5)(b)(i).

^{159.} AMA COUNCIL ON MED. EDUC., REPORT 1 OF THE COUNCIL ON MEDICAL EDUCATION 7 (2018), https://www.aap.org/globalassets/sonpm/wecan/sonpm-wecanseniorphysicianscompetency.pdf.

^{160.} *Id.* at 13.

^{161.} Paul W. Gleason, *Physician Assessments: Ageist or Necessary?*, PSYCHIATRIC TIMES (Apr. 5, 2021), https://www.psychiatrictimes.com/view/physician-assessments-ageist-necessary.

III. THE FEDERAL ANTIDISCRIMINATION STATUTES: THE ADEA, THE ADA, AND TITLE VII

Three federal statutes govern employers' treatment of workers with cognitive decline: the ADEA, ¹⁶² Title I of the ADA, ¹⁶³ and potentially, Title VII. ¹⁶⁴ Note that these laws apply only to individuals who are considered employees and not to those who are self-employed or independent contractors. ¹⁶⁵ Many contemporary workers, including some doctors and lawyers, are not technically employees, even if they are subject to some organizational policies. ¹⁶⁶ This Article focuses on employer-employee relationships. The pertinent provisions of the federal civil rights statutes that protect employees are examined in this Part. The next Part will apply these provisions to employment practices that can affect individuals with cognitive decline.

A. The ADEA

The ADEA establishes that it is unlawful for employers "to fail or refuse to hire or to discharge any individual or otherwise discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's age." Likewise, employers may not "limit, segregate, or classify" employees in ways that "would deprive or tend to deprive" them of employment opportunities or otherwise adversely affect them because of their age. 168

^{162. 29} U.S.C. §§ 621–634.

^{163. 42} U.S.C. §§ 12101–12117.

^{164. 42} U.S.C. § 2000e-2.

^{165.} See Flannery v. Recording Indus. Ass'n of Am., 354 F.3d 632, 642 (7th Cir. 2004); Coverage, U.S. EQUAL EMP. OPPORTUNITY COMM'N, https://www.eeoc.gov/employers/coverage-0 (last visited Feb. 13, 2022). See also Community for Creative Non-Violence v. Reid, 490 U.S. 730, 750–51 (1989), for a list of factors that courts should consider in determining whether an individual is an employee or an independent contractor.

^{166.} See AMA Analysis Shows Most Physicians Work Outside of Private Practice, AMA (May 5, 2021), https://www.ama-assn.org/press-center/press-releases/ama-analysis-shows-most-physicians-work-outside-private-practice (noting that in 2020, 50.2 percent of patient-care physicians were employees, 44 percent were self-employed, and the remainder were likely independent contractors); Ike Devji, Classifying "Independent Contractors" in Your Medical Practice, Physicians Prac. (Aug. 26, 2014), https://www.physicianspractice.com/view/classifying-independent-contractors-your-medical-practice; Robert W. Wood, Even Lawyers Face Independent Contractor-Employee Disputes, FORBES (June 22, 2017, 8:53 AM), https://www.forbes.com/sites/robertwood/2017/06/22/even-lawyers-face-independent-contractor-employee-disputes/?sh=48ff17114064.

^{167. 29} U.S.C. § 623(a)(1).

^{168.} *Id.* § 623(a)(2).

Employers must comply with the ADEA if they have twenty or more employees. 169 Workers are protected by the law if they are forty years of age or older. 170

The statute is understood to prohibit age-based harassment as well.¹⁷¹ Courts have recognized that plaintiffs may prevail in harassment suits if they are subjected to unwelcome harassment that is based on age and affects "a term, condition, or privilege of employment" so long as the employer "knew or should have known" about the harassment and did not "take prompt remedial action." Persistent, derogatory comments about an individual's age can constitute unlawful harassment. ¹⁷³

The ADEA, however, establishes certain exceptions to its antidiscrimination mandate. Employers are permitted to require individuals who have served in "bona fide executive" or "high policymaking" positions for at least two consecutive years to retire at the age of sixty-five under certain circumstances.¹⁷⁴ Similarly, employers may set mandatory retirement ages for firefighters and law enforcement officers in accordance with federal, state, or local law.¹⁷⁵ Presumably, the ADEA exemptions for these workers are based at least partly on concerns about cognitive deficits in older individuals.

In addition, the ADEA permits employers to make adverse agebased decisions with respect to employees if age is a bona fide occupational qualification ("BFOQ") that is reasonably necessary for purposes of business operations.¹⁷⁶ A federal regulation explains the BFOQ standard as follows:

An employer asserting a BFOQ defense has the burden of proving that (1) the age limit is reasonably necessary to the essence of the business, and either (2) that all or substantially all individuals excluded from the job involved are in fact disqualified, or (3) that some of the individuals so excluded possess a disqualifying trait that cannot be ascertained except by reference to age. If the employer's objective in asserting a

^{169.} Id. § 630(b).

^{170.} Id. § 631(a).

^{171.} See Harassment, U.S. EQUAL EMP. OPPORTUNITY COMM'N, https://www.eeoc.gov/harassment (last visited Feb. 14, 2022).

^{172.} Norris v. Acadiana Concern for Aids Relief Educ. & Support, 421 F. Supp. 3d 399, 408 (W.D. La. 2019); see also Amini v. Rite Aid Corp., 819 F. App'x 344, 347 (6th Cir. 2020).

^{173.} See Landucci v. State Farm Ins., 65 F. Supp. 3d 694, 709 (N.D. Cal. 2014).

^{174. 29} U.S.C. § 631(c)(1); 29 C.F.R. § 1625.12 (2021).

^{175.} See 29 U.S.C. § 623(j); 5 U.S.C. § 8335(b)(1); Information on Special Retirement for Firefighters and Law Enforcement Officers, U.S. Dep't of the Interior (June 19, 2019), https://www.doi.gov/sites/doi.gov/files/uploads/information_on_special_retirement_for_ffleo.pdf.

^{176. 29} U.S.C. § 623(f)(1).

BFOQ is the goal of public safety, the employer must prove that the challenged practice does indeed effectuate that goal and that there is no acceptable alternative which would better advance it or equally advance it with less discriminatory impact.¹⁷⁷

It is noteworthy that the ADEA originally permitted colleges and universities to require tenured professors to retire at the age of seventy.¹⁷⁸ This exemption, however, was abandoned at the end of 1993.¹⁷⁹

B. The ADA

The ADA prohibits employers with fifteen or more employees from engaging in disability discrimination and is somewhat more complex than the ADEA. Specifically, the statute bans disability-based discrimination against qualified individuals with disabilities with respect to application processes, hiring, advancement, termination, compensation, training, and "other terms, conditions, and privileges of employment." The terms "disability" and "qualified," however, require further explication. The ADA also specifically addresses how and when employers may conduct medical examinations and make medical inquiries. 183

1. Disability

Under the ADA, individuals can be deemed to have a disability under any of these three circumstances: (A) they have "a physical or mental impairment that substantially limits one or more major life activities"; (B) they have "a record of such an impairment"; and (C) they are "regarded as having such an impairment." ¹⁸⁴

The statute clarifies the third prong of the disability definition by explaining that it applies "whether or not the impairment limits or is perceived to limit a major life activity." Accordingly, an employer is prohibited from discriminating against a cognitively impaired individual even if the employer believes the impairment is only mild and does not rise to the level of a mental disability. Transitory or minor impairments that last six months or less, such as a broken leg or the flu, are not covered by the ADA. 186

^{177. 29} C.F.R. § 1625.6(b) (2021).

^{178. 29} U.S.C. § 631(d), repealed by Pub. L. No., 99-592, § 6(b), 100 Stat. 3342, 3344 (1986).

^{179.} Earle & Kulow, *supra* note 6, at 369–70.

^{180. 42} U.S.C. §§ 12111(5)(A), 12112(a).

^{181.} Id. § 12112(a).

^{182.} See discussion infra Subparts III.B.1, III.B.2.

^{183.} See discussion infra Subpart III.B.5.

^{184. 42} U.S.C. § 12102(1)(A)–(C).

^{185.} Id. § 12102(3)(A).

^{186.} Id. § 12102(3)(B).

The term "major life activities" is defined through a nonexclusive list of examples. 187 Among them are caring for oneself, learning, reading, concentrating, thinking, communicating, and working, all of which are relevant for people with cognitive decline. 188 Major life activities also include major bodily functions such as brain functioning. 189

Episodic disabilities are explicitly covered by the ADA. 190 Thus, a person with cognitive decline who has good days and bad days would not be excluded from protection.

2. Qualified

The ADA protects only individuals who are qualified for the job in question. ¹⁹¹ But employers may not simply reject or terminate workers who cannot perform all job functions because of a disability. Rather, individuals are deemed qualified if they can perform the essential functions of a job with or without an accommodation. ¹⁹²

It follows that employers must determine what duties are essential for the job. 193 In litigation, consideration will be given to the employer's own judgment regarding essential work functions, and employers are advised to list essential functions in job descriptions. 194 Individuals should not be subjected to adverse action if their disabilities limit them only in performing *marginal* job tasks because these are not of central importance to successful job performance. 195

3. Direct Threat

Employees with disabilities are not qualified for jobs in which they would pose a direct threat to themselves or others. A "direct threat" is a "significant risk of substantial harm to the health or safety of the individual or others that cannot be eliminated or reduced by reasonable accommodation." 197

The determination as to whether someone would pose a direct threat in the workplace must be based on an individual assessment of medical evidence regarding the person's current (not future)

^{187.} *Id.* § 12102(2)(A).

^{188.} *Id*.

^{189.} Id. § 12102(2)(B).

^{190.} *Id.* § 12102(4)(D).

^{191.} Id. § 12112(a).

^{192.} *Id.* § 12111(8).

^{193.} *Id*.

^{194.} Id.

^{195.} *Id*.

^{196.} Id. § 12113(b); 29 C.F.R. § 1630.2(r) (2021); Persons with Intellectual Disabilities in the Workplace and the ADA, U.S. EQUAL EMP. OPPORTUNITY COMM'N (May 15, 2013) [hereinafter Persons with Intellectual Disabilities], https://www.eeoc.gov/laws/guidance/persons-intellectual-disabilities-workplace-and-ada.

^{197. 29} C.F.R. § 1630.2(r) (2021).

abilities.¹⁹⁸ Four factors are to be considered: "(1) The duration of the risk; (2) The nature and severity of the potential harm; (3) The likelihood that the potential harm will occur; and (4) The imminence of the potential harm."¹⁹⁹

4. Reasonable Accommodation

Employers, working together with applicants or employees with disabilities, must also determine whether they can provide a reasonable accommodation that would enable competent and safe job performance. Examples of reasonable accommodations that might assist individuals with cognitive decline are job restructuring, adjusted work schedules, part-time work, reassignment to a different position, and modifications to examinations, training material, and policies. ²⁰¹

Failure to provide a reasonable accommodation to an otherwise qualified individual with a disability constitutes discrimination that is banned by the ADA.²⁰² Employers may deny needed accommodations only if the accommodations would cause them undue hardship and thus would not be reasonable.²⁰³

Employers should engage in an informal, interactive process with employees to identify and implement appropriate reasonable accommodations if they cannot immediately come to an agreement.²⁰⁴ An employer cannot unilaterally refuse to accommodate an employee without discussion even if the person initially requested an overly cumbersome adjustment.²⁰⁵ Yet, given several choices, the employer can select the least burdensome accommodation that is effective.²⁰⁶

Four factors are to be considered in determining whether an accommodation would impose an undue hardship upon an employer: (1) The accommodation's nature and cost; (2) the specific facility's financial resources, including the number of its employees and the impact of the accommodation on the facility's operations; (3) the employer's financial resources (if it has multiple facilities), including its number of employees and facilities; and (4) the employer's type of

100. 11.6

^{198.} *Id*.

^{199.} *Id.* § 1630.2(r)(1)–(4).

^{200. 42} U.S.C. § 12112(b)(5)(A).

^{201.} Id. § 12111(9)(B).

^{202.} *Id.* § 12112(b)(5)(A).

^{203.} *Id*.

^{204. 29} C.F.R. § 1630.2(o)(3) (2021); Enforcement Guidance on Reasonable Accommodation and Undue Hardship Under the ADA, U.S. EQUAL EMP. OPPORTUNITY COMM'N (Oct. 17, 2002), https://www.eeoc.gov/laws/guidance/enforcement-guidance-reasonable-accommodation-and-undue-hardship-under-ada [hereinafter Enforcement Guidance on Reasonable Accommodation].

^{205.} See Enforcement Guidance on Reasonable Accommodation, supra note 204.

^{206.} *Id*.

operation, including workforce composition, structure, and functioning and details concerning its different facilities.²⁰⁷

5. Medical Examinations and Inquiries

The ADA establishes rules and limitations for medical inquiries and examination.²⁰⁸ To that end, it considers three phases of employment.²⁰⁹

First is the application stage. Before extending an offer of employment, an employer may not ask an applicant any medical questions or conduct medical examinations.²¹⁰ Nevertheless, employers may ask applicants whether they can perform specific job tasks or ask them to demonstrate their ability to do so.²¹¹ Thus, an employer could ask an applicant for a professor position to give a guest lecture, even if the lecture might reveal indications of cognitive decline.

Second, employers can make use of a window of opportunity between extending an offer of employment and the worker's starting date. During this time, employers may conduct whatever examinations they wish so long as all entering employees must undergo the examinations. The only exception is genetic testing, which is prohibited by the Genetic Information Nondiscrimination Act. All other testing is permitted, presumably so that employers can determine if employees are physically and mentally qualified for the job with or without reasonable accommodations. Test results must be kept confidential, though medical information may be disclosed to supervisors for purposes of accommodation or to first aid and safety personnel for purposes of emergency treatment.

Third, after the commencement of employment, any medical inquiries or examinations must be "job-related and consistent with business necessity." No other testing or queries are permitted unless they are part of a voluntary wellness program.²¹⁸

^{207. 42} U.S.C. § 12111(10)(B)(i)–(iv).

^{208.} Id. § 12112(d).

^{209.} Id.

^{210.} Id. § 12112(d)(2)(A).

^{211.} Id. § 12112(d)(2)(B).

^{212.} Id. § 12112(d)(3).

^{213.} Id. § 12112(d)(3)(A).

^{214.} Genetic Information Nondiscrimination Act of 2008 § 203(b), 42 U.S.C. § 2000ff-1(b).

^{215.} Id. § 12112(d)(3)(A)–(B)(i); see Sharona Hoffman, Preplacement Examinations and Job-Relatedness: How to Enhance Privacy and Diminish Discrimination in the Workplace, 49 U. Kan. L. Rev. 517, 519 (2001) (arguing that at this second stage, employers should not be authorized to conduct testing that is not directly relevant to the performance of job duties).

^{216. 42} U.S.C. § 12112(d)(3)(B).

^{217.} Id. § 12112(d)(4)(A).

^{218.} Id. § 12112(d)(4)(B).

The ADA establishes a confidentiality mandate with respect to medical information that is gathered during the employment period.²¹⁹ This confidentiality provision mirrors the one that relates to health data obtained before a worker's start date.²²⁰ To safeguard privacy, medical data must be kept separately, in a file that is different from the employee's general personnel file.²²¹

C. Title VII

In some cases, cognitive testing may run afoul of Title VII.²²² Title VII prohibits employment discrimination based on race, color, religion, sex, and national origin.²²³ This prohibition includes forbidding the use of employment practices that disproportionately disadvantage workers of a particular race, color, religion, sex, or national origin unless the practice is job-related and justified by business necessity.²²⁴

Employees can prevail in disparate impact cases without proving that the employer had an intent to discriminate.²²⁵ Underlying the Title VII disparate impact theory is the premise that "some employment practices, adopted without a deliberately discriminatory motive, may in operation be functionally equivalent to intentional discrimination."²²⁶

Tests that measure cognitive ability are suspect for having a disparate impact on African Americans because of persistent scoring gaps between White and Black test-takers.²²⁷ These differences are often attributed to socioeconomic factors such as education, household

^{219.} Id. § 12112(d)(4)(C).

^{220.} Id. § 12112(d)(3)(B).

^{221. 29} C.F.R. § 1630.14(c)(1) (2021).

^{222.} See Employment Tests and Selection Procedures, U.S. EQUAL EMP. OPPORTUNITY COMM'N (Dec. 1, 2007), https://www.eeoc.gov/laws/guidance/employment-tests-and-selection-procedures.

^{223. 42} U.S.C. § 2000e-2(a).

^{224.} *Id.* § 2000e-2(k)(1)(A)(i).

^{225.} Michael Selmi, Was the Disparate Impact Theory a Mistake?, 53 UCLA L. Rev. 701, 702 (2006).

^{226.} Pippin v. Burlington Res. Oil & Gas Co., 440 F.3d 1186, 1199 (10th Cir. 2006) (quoting Ortega v. Safeway Stores, Inc., 943 F.2d 1230, 1242 (10th Cir. 1991)).

^{227.} Amy L. Wax, Disparate Impact Realism, 53 Wm. & Mary L. Rev. 621, 685 (2011) ("[B]lack-white differences in mean scores on general mental ability tests are typically two to three times larger than differences commonly observed in job performance."); Kathy R. Neal, EEOC Takes Aim at Target for Discriminatory Pre-employment Tests, McAfee & Taft (Aug. 26, 2015), https://www.mcafeetaft.com/eeoc-takes-aim-at-target-for-discriminatory-preemployment-tests/.

income, and family circumstances that can hamper intellectual development, especially in children.²²⁸

To establish the business necessity defense in the case of required testing, an employer must prove that the examination is necessary to determine whether employees can perform their work safely and efficiently.²²⁹ The test must, therefore, assess capacities that are relevant to the job at issue.²³⁰

If an employer demonstrates that a challenged practice is jobrelated and consistent with business necessity, the plaintiff still has an opportunity to prevail. The plaintiff may show that there is an alternative that would work well for the employer in lieu of the action that causes a disparate impact.²³¹ In the language of the Supreme Court, the plaintiff can prove "that other tests or selection devices, without a similarly undesirable racial effect, would also serve the employer's legitimate interest in 'efficient and trustworthy workmanship."²³²

The seminal United States Supreme Court disparate impact decision in the 1971 *Griggs v. Duke Power Co.*²³³ case involved testing of employees.²³⁴ *Griggs* was a class action in which African American laborers successfully challenged an employer's requirement that employees or applicants earn a high school diploma or pass two standardized aptitude tests in order to be hired or transferred to a better job.²³⁵ The Court ruled against the employer because it could not prove that the requirements were related to satisfactory job performance and because the requirements also disproportionately disqualified African Americans.²³⁶

IV. APPLYING THE LAW: WHAT EMPLOYERS CAN AND CANNOT DO

Employers must consider a complex body of statutory and regulatory provisions in formulating their approach to workers with suspected or diagnosed cognitive decline.²³⁷ Although dozens of judicial decisions involve individuals with chronic diseases or traumatic injuries that cause cognitive problems, very few address

231. 42 U.S.C. § 2000e-2(k)(1)(A)(ii).

^{228.} See Jonathan M. Cottrell et al., Explaining the Black-White Gap in Cognitive Test Scores: Toward a Theory of Adverse Impact, 100 J. Applied Psych. 1713, 1713 (2015).

^{229.} Employment Tests and Selection Procedures, supra note 222.

^{230.} Id.

^{232.} Albemarle Paper Co. v. Moody, 422 U.S. 405, 425 (1975) (quoting McDonnell Douglas Corp. v. Green, 411 U.S. 792, 801 (1973)).

^{233. 401} U.S. 424 (1971).

^{234.} *Id.* at 430–32.

^{235.} *Id.* at 425–31. The two tests were "the Wonderlic Personnel Test, which purports to measure general intelligence, and the Bennett Mechanical Comprehension Test." *Id.* at 428.

^{236.} Id. at 428, 436.

^{237.} See supra Part III.

age-related cognitive deficits, which are the subject of this Article.²³⁸ This Part assesses several potential strategies that employers may consider. It analyzes the law to determine what it permits and forbids employers to do to address concerns about workers' changing intellectual capacities.

A. Mandatory Retirement

Employers generally may not institute mandatory retirement ages.²³⁹ Requiring individuals to retire at a particular age regardless of their ability to continue to perform their job duties would violate the ADEA²⁴⁰ and be an undesirable approach for policy and ethical reasons.

1. ADEA Violation

The ADEA establishes exceptions to the compulsory retirement ban for workers who are firefighters, law enforcement officers, and bona fide executives or high-level policymakers.²⁴¹ Other federal laws establish further allowances for mandatory retirement ages in jobs that involve public safety, such as air traffic controllers, pilots, and members of the Foreign Service.²⁴² These very specific carve-outs are consistent with the ADEA's BFOQ provision, which, when necessary, allows employers to promote public safety at the expense of age limits.243

In addition, thirty-two states and the District of Columbia legislate age restrictions for judicial service.²⁴⁴ In Gregory v. Ashcroft, 245 Missouri judges challenged the Missouri Constitution's

^{238.} The following cases address age-related cognitive decline: Stern v. St. Anthony's Health Ctr., 788 F.3d 276 (7th Cir. 2015); Pro. Pilots Fed'n v. Fed. Aviation Admin., 118 F.3d 758 (D.C. Cir. 1997); Spinelli v. City of N.Y., L. Dep't, 13-CV-07112, 2016 WL 11482071 (S.D.N.Y. Aug. 30, 2016); Valenzisi v. Stamford Bd. of Educ., 948 F. Supp. 2d 227 (D. Conn. 2013); Urtnowski v. Unisys Corp., No. SACV 07-714, 2008 WL 11338024 (C.D. Cal. Nov. 24, 2008); Gauthier v. E. Or. Corr. Inst., No. 04-290-HA, 2005 WL 8176974 (D. Or. July 26, 2005).

^{239.} Shaleen Morales Saldarriaga, Note, Flaming Fifties and Beyond: An International Comparison of Age Discrimination Laws and How the United States Could Improve the Laws for Elderly Women, 25 Elder L.J. 101, 124–25 (2017) (discussing mandatory retirement).

^{240. 29} U.S.C. § 623(a)(1).

^{241.} *Id.* §§ 623(j), 631(c)(1); 29 C.F.R. § 1625.12 (2021).

^{242. 5} U.S.C. § 8335(a); 49 U.S.C. § 44729(a); 22 U.S.C. § 4052(a)(1).

^{243.} See supra notes 176–77 and accompanying text; Equal Emp. Opportunity Comm'n v. Exxon Mobil Corp., 560 F. App'x 282, 283 (5th Cir. 2014) (affirming dismissal of a challenge to Exxon's policy requiring corporate pilots to retire at age sixty and accepting Exxon's bona fide occupational qualification affirmative defense).

^{244.} Shen, *supra* note 7, at 275.

^{245. 501} U.S. 452 (1991).

mandatory retirement provision.²⁴⁶ The United States Supreme Court held that the requirement that judges retire at age 70 does not violate the ADEA.²⁴⁷ The Court cited the ADEA's definition of the term "employee" as justification.²⁴⁸ The law states that "the term 'employee' shall not include any person elected to public office in any State or political subdivision . . . or an appointee on the policymaking level"²⁴⁹ The Court determined that this language is broad enough to include judges.²⁵⁰ The Court further found that the retirement mandate did not violate the Equal Protection Clause under the "rational basis" review standard for age-related classifications.²⁵¹

If none of the ADEA's specific exemptions apply, the statute's antidiscrimination mandate must govern employers' retention and termination decisions.²⁵² Thus, the majority of employers cannot institute forced retirement policies.

2. Policy and Ethical Considerations

Many older workers are physically and mentally fit to continue working and benefit from far more years of experience than younger employees.²⁵³ Mandatory retirement policies would thus likely be overinclusive and eliminate many highly competent and productive individuals from the workforce. At the same time, such policies can be underinclusive because some individuals suffer cognitive decline before they reach retirement age.²⁵⁴

For some older adults, continuing to work may also be vital for financial or psychological reasons. Many seniors have meager or nonexistent retirement savings.²⁵⁵ In addition, millions of seniors support adult children or raise grandchildren and need income in order to do so.²⁵⁶ Moreover, people who are forced to retire may lose

^{246.} Id. at 455.

^{247.} *Id.* at 467.

^{248.} Id.

^{249. 29} U.S.C. § 630(f).

^{250.} Gregory, 501 U.S. at 467 ("In the context of a statute that plainly excludes most important state public officials, 'appointee on the policymaking level' is sufficiently broad that we cannot conclude that the statute plainly covers appointed state judges. Therefore, it does not.").

^{251.} Id. at 470, 473.

^{252.} See U.S. Equal Emp. Opportunity Comm'n, EEOC Informal Discussion Letter (Dec. 18, 2017), https://www.eeoc.gov/foia/eeoc-informal-discussion-letter-318.

^{253.} Soonsawat et al., *supra* note 10, at 632.

^{254.} See supra notes 52–54 and accompanying text.

^{255.} See supra notes 107–10 and accompanying text.

^{256.} Kent Allen, Grandparents Report Success in Raising Grandchildren, AARP (Nov. 6, 2018), https://www.aarp.org/home-family/friends-family/info-2018/grandparents-raising-kids.html; John Creamer et al., More Young Adults Lived with Their Parents in 2019, U.S. CENSUS BUREAU (Sept. 15, 2020),

their sense of purpose and find that their lives lack meaning and consequently suffer depression and other mental health problems.²⁵⁷ Consequently, mandatory retirement policies can subject older adults to significant harm.

B. Mandatory Cognitive Testing Beginning at a Particular Age

Several medical employers have instituted cognitive testing requirements for individuals who reach particular ages (often the age of seventy).²⁵⁸ Because of concerns about patient welfare, such policies may appear to be sound.²⁵⁹ Nonmedical employers may find this approach appealing as well, but it is legally impermissible. While it might be tempting to argue that the law should be altered to allow for more liberal testing policies, its existing restrictions are logically and ethically sensible.

In 2020, the EEOC sued Yale New Haven Hospital because of its policy requiring clinicians who are seventy or older to undergo neuropsychological screening for purposes of initial appointment or reappointment.²⁶⁰ The EEOC asserted that the Late Career Practitioner Policy violated both the ADEA and the ADA. The agency is right to challenge the practice.²⁶¹

1. ADEA Violation

When older workers must endure testing that younger workers are spared merely because they have reached a particular birthday,

https://www.census.gov/library/stories/2020/09/more-young-adults-lived-with-their-parents-in-2019.html; Richard Eisenberg, Parents' Support to Adult Kids: A Stunning \$500 Billion a Year, FORBES (Oct. 2, 2018, 11:43 AM), https://www.forbes.com/sites/nextavenue/2018/10/02/parents-support-to-adult-kids-a-stunning-500-billion-a-year/?sh=74d35d425c87; Janna Herron, Millennials Still Lean on Parents for Money but Want Financial Independence, Survey Says, USA TODAY (Apr. 18, 2019, 12:01 AM), https://www.usatoday.com/story/money/2019/04/18/millennial-money-why-young-adults-still-need-support-parents/3500346002/.

^{257.} See Sharona Hoffman, Aging with a Plan: How a Little Thought Today Can Vastly Improve Your Tomorrow 39–40, 194–95 (2d ed. 2022); Nancy Schimelpfening, How to Deal with Depression After Retirement, Verywell Mind (Jan. 28, 2021), https://www.verywellmind.com/depression-after-retirement-1067239.

^{258.} See supra notes 146–156 and accompanying text.

^{259.} CAL. Pub. Prot. & Physician Health, Inc., Assessing Late Career Practitioners: Policies and Procedures for Age-based Screening 5–6 (2014), https://www.cppph.org/wp-content/uploads/2015/07/assessing-late-career-practitioners-adopted-by-cppph-changes-6-10-151.pdf (discussing the clinical case for assessing late-career practitioners).

^{260.} Complaint, supra note 150, at 5–6.

^{261.} Id. at 6–8; see also Ilene N. Moore, Screening Older Physicians for Cognitive Impairment: Justifiable or Discriminatory?, 28 HEALTH MATRIX 95, 136 (2018).

they are subjected to discrimination with respect to their "terms, conditions, or privileges of employment" because of their age.²⁶² Working without being suspected of having cognitive deficits and without being tested for them is a condition or privilege of employment.²⁶³ Furthermore, when an employer scrutinizes older employees who are performing adequately in order to identify cognitive deficits but does not do the same with younger people, it can be said "to limit, segregate, or classify... employees" in ways that could deprive them "of employment opportunities or otherwise adversely affect" their status as employees because of their age.²⁶⁴

The ADEA's BFOQ provision would not save an employer's mandatory testing policy. The BFOQ affirmative defense applies when age itself "is a bona fide occupational qualification reasonably necessary to the normal operation of the particular business." ²⁶⁵ In the case of cognitive testing, the employer is not, in truth, concerned with the worker's age but rather with his or her mental acuity. The employer intends to retain older employees so long as they are not cognitively impaired, and thus the age-based assessment policy would fall outside the boundaries of the BFOQ defense.

The ADEA further permits employers to treat older individuals differently "where the differentiation is based on reasonable factors other than age." But when an employer tests older but not younger employees, the distinction is quite clearly based solely on age, rendering this provision inapplicable as well.

2. ADA Violation

The ADA permits employers to subject existing employees to medical queries or examinations only if those tests or inquiries are "job-related and consistent with business necessity." Testing all employees in a certain age group regardless of whether they exhibit any job performance problems is not justified by business necessity. Such testing would not reveal whether individuals can complete job tasks competently, because persons with lower scores can remain effective workers. 268

Some employers may argue that a high level of mental acuity itself is vital for job performance because of the intellectually challenging nature of the work. But if that is the case, it would defy reason to test only workers who are beyond a certain age.²⁶⁹ Testing

^{262. 29} U.S.C. § 623(a)(1).

^{263.} Id.

^{264.} Id. § 623(a)(2).

^{265.} *Id.* § 623(f)(1).

^{266.} Id.

^{267. 42} U.S.C. § 12112(d)(4)(A).

^{268.} See supra note 64 and accompanying text.

^{269.} See *infra* Subpart IV.C for a discussion of cognitive testing for all employees.

only older employees would leave deficits that develop at younger ages undetected.²⁷⁰

Instead, employers should evaluate all employees' work quality periodically and assess whether low performers require consultation with a medical expert.²⁷¹ Testing employees purely because of their age does not comport with the ADA's medical inquiry rules and, more importantly, does not serve an employer's need for a competent workforce.²⁷²

3. Disparate Impact Concerns

Cognitive testing of older employees may not only violate the ADEA and ADA but may also have a disparate impact on members of minority groups in violation of Title VII.²⁷³ According to experts, Black individuals, on average, achieve lower scores than Whites on cognitive tests.²⁷⁴ These differences may be explained by socioeconomic factors such as educational background, reading ability, and financial well-being and may not reflect one's ability to think or perform one's job.²⁷⁵ Thus, if routine testing is conducted, Black employees may be disproportionately and incorrectly identified as having cognitive deficits that affect job performance and consequently may be subjected to adverse employment actions.

Cognitive tests have not escaped the attention of the EEOC. In *EEOC v. Ford Motor Co. and United Automobile Workers of America*,²⁷⁶ the EEOC sued defendants on behalf of a nationwide class of African Americans who failed to obtain positions in a Ford apprenticeship program after taking a cognitive test.²⁷⁷ The test in question was the Apprenticeship Training Selection System ("ATSS"),

^{270.} See supra notes 52–54 and accompanying text.

^{271.} Stern v. St. Anthony's Health Ctr., 788 F.3d 276, 294 (2015) ("We have held that an employer does not have to wait for a disabled employee in a sensitive position to injure someone before it can evaluate the employee's fitness for duty...."). See *infra* Subpart IV.E for a discussion of permitted employer conduct.

^{272. 42} U.S.C. § 12112(d)(4)(A).

^{273.} Employment Tests and Selection Procedures, supra note 222.

^{274.} Kala M. Mehta et al., Black and White Differences in Cognitive Function Test Scores: What Explains the Difference?, 52 J. Am. Geriatric Soc'y 2120, 2120 (2004); Jennifer Weuve et al., Cognitive Aging in Black and White Americans: Cognition, Cognitive Decline, and Incidence of Alzheimer Disease Dementia, 29 Epidemiology 151, 151 (2018).

^{275.} See Mehta et al., supra note 274, at 2124. The study notes that "after adjustment for socioeconomic factors and other variables, the difference in scores between blacks and whites decreased substantially." Id. at 2126; see also Weuve et al., supra note 274, at 155 ("Educational attainment, as measured by years of education, appeared to mediate a substantial fraction but not the totality of the racial differences in baseline cognitive score.").

^{276.} No. 04-CV-00845, 2004 WL 3951846 (S.D. Ohio Dec. 1, 2004).

^{277.} Id.

a written cognitive test that evaluated "verbal, numerical, and spatial reasoning in order to measure mechanical aptitude." The ATSS disproportionately disadvantaged African American applicants, and thus, the EEOC asserted that it violated Title VII's disparate impact provision. According to the EEOC, Ford continued to use the ATSS even after the development of less discriminatory selection procedures that would serve its needs. The parties settled the case for \$8.55 million in monetary damages, and Ford agreed to replace the ATSS with a selection procedure that would be designed by a jointly chosen industrial psychologist. Page 18.55

Employers who require all their older employees to undergo cognitive testing may face claims of disparate impact if they take any action based on those scores. Even if they do not, Black employees may claim that they were subjected to discrimination with respect to the "terms, conditions, or privileges of employment" because test outcomes that suggest cognitive impairment caused them stress and unhappiness.²⁸² To defend against those claims, employers would have to prove that the particular examination is necessary to maintain a competent workforce and that no less discriminatory alternative exists.²⁸³ As argued above, the business necessity defense will fail with respect to a general policy of cognitive testing for all older employees.²⁸⁴

4. Privacy Concerns

Employers who require cognitive examinations will be obligated to ensure that the results remain confidential.²⁸⁵ They would be able to disclose testing outcome data only to appropriate personnel for purposes of first aid, ADA compliance investigations, and making employment decisions, such as providing reasonable accommodations.²⁸⁶ The well-known Health Insurance Portability and Accountability Act ("HIPAA") Privacy Rule does not apply to employers. It applies only to health plans, healthcare clearinghouses,

^{278.} Employment Tests and Selection Procedures, supra note 222.

^{279.} Id.

^{280.} Id.

^{281.} Id.; EEOC, Ford, UAW, Class Members Voice Approval of Landmark Race Discrimination Settlement, U.S. EQUAL EMP. OPPORTUNITY COMM'N (June 1, 2005), https://www.eeoc.gov/newsroom/eeoc-ford-uaw-class-members-voice-approval-landmark-race-discrimination-settlement-1.

^{282. 42} U.S.C. § 2000e-2(a)(1); U.S. Preventive Servs. Task Force, Screening for Cognitive Impairment in Older Adults, 323 JAMA 757, 759 (2020) ("One potential harm is labeling a person with an illness that is typically progressive and for which treatment appears to have limited effectiveness. Some studies have shown higher stress, greater depression, and lower quality of life.").

^{283.} See supra notes 229–32 and accompanying text.

^{284.} See supra Subpart IV.B.2.

^{285.} See supra notes 219–21 and accompanying text.

^{286. 29} C.F.R. § 1630.14(c) (2021).

2022]

healthcare providers who transmit health information electronically for purposes of HIPAA-relevant transactions, and their business associates.²⁸⁷ The employer's duty of confidentiality arises instead from the ADA.²⁸⁸

Despite the statutory privacy protection, employees might distrust employers and fear that their results will be improperly disclosed.²⁸⁹ They may also fear that they will be terminated or demoted at the first sign of any deficit, even if they can still perform their jobs well. It may be tempting for employers to select these employees for layoffs, claiming financial hardship, or to eliminate their positions, claiming that they are no longer needed.

To reassure workers about privacy, employers might turn to a different strategy. Employers could instruct older employees to undergo testing but not require them to disclose their outcomes. In doing so, employers would rely on low-scoring individuals to retire on their own initiative or to request accommodations.²⁹⁰ Under such a system, the employer could ask for proof that an examination took place but would never obtain test results. Thus, the employer would not be vulnerable to accusations of privacy violations or discrimination. However, employers would have to trust employees to react appropriately to their scores and to approach the employer when test outcomes raise concerns about work abilities.²⁹¹ It may well be too much to expect all employees to do so.²⁹² Those with true cognitive deficits may not be able to fully comprehend their condition or have a reasonable conversation with their employer about it. Others will be in denial or will be unwilling to risk demotion or job loss.

Mandatory Cognitive Testing for All Employees C.

To avoid violating the ADEA, employers might test all workers. regardless of age, for cognitive impairment, perhaps at regular intervals. Professor Francis Shen has suggested that this approach be applied to judges.²⁹³ He proposes that state and federal judges be required to take cognitive health assessments at least every five years so that they can determine if they are suffering from cognitive decline and need to step down.²⁹⁴ Under Shen's proposal for judges, the

^{287. 42} U.S.C. § 17934; 45 C.F.R. §§ 160.102–103 (2021).

^{288.} See supra notes 219–21 and accompanying text.

^{289.} Morris B. Hoffman, Commentary, A Commentary on Professor Shen's Aging Judges, 81 Ohio St. L.J. Online 167, 175 (2020) (discussing cognitive testing of judges and asserting that "[n]o one knows better than judges that there is no such thing as inviolate privacy").

^{290.} See Shen, supra note 7, at 238.

^{291.} Hoffman, *supra* note 289, at 180.

^{292.} Id.

^{293.} Shen, *supra* note 7, at 238.

^{294.} *Id*.

assessments would be mandatory, but their results would be confidential and available only to the individual tested.²⁹⁵ By contrast, most employers that invest in a testing program would presumably require disclosure of testing scores. Such mandatory, periodic testing of all employees may be no less problematic than testing only older employees.

1. ADA and Disparate Impact Concerns

For most jobs, employers would likely have significant difficulty proving that testing all employees for cognitive decline, regardless of whether they have any work difficulties, is truly consistent with business necessity, as is required by the ADA.²⁹⁶ According to the EEOC, "[i]n most instances, an employer's need to make disability-related inquiries or require medical examinations will be triggered by evidence of *current* performance problems or observable evidence suggesting that a particular employee will pose a direct threat."²⁹⁷

Employers may be permitted to deviate from this principle with respect to jobs that affect public safety.²⁹⁸ Employers may routinely test workers such as firefighters and police officers, but only so long as the examinations are "narrowly tailored to address specific jobrelated concerns."²⁹⁹ It is doubtful that general cognitive tests administered to the entire workforce meet the standard of carefully targeting particular work performance problems.

One notable exception is the Federal Aviation Administration's requirement that pilots undergo neuropsychological assessments for possible neurocognitive impairments.³⁰⁰ This federal agency policy is justifiable because pilots are responsible for the lives of hundreds of people every day, and even small lapses in concentration or mental capacity can be catastrophic.

Otherwise, employers with broad testing requirements may violate not only the ADA but also Title VII. Testing all workers regardless of age raises even greater disparate impact concerns than an age-based testing policy because larger numbers of workers would be involved. Furthermore, if testing does have a disparate impact on Black workers, employers would find it very difficult to establish that

^{295.} Id.

^{296. 42} U.S.C. § 12112(d)(4)(A).

^{297.} Enforcement Guidance on Disability-Related Inquiries and Medical Examinations of Employees Under the ADA, U.S. EQUAL EMP. OPPORTUNITY COMM'N (July 26, 2000) [hereinafter Enforcement Guidance on Disability-Related Inquiries], https://www.eeoc.gov/laws/guidance/enforcement-guidance-disability-related-inquiries-and-medical-examinations-employees.

^{298.} Id.

^{299.} *Id*.

^{300.} Guide for Aviation Medical Examiners, FED. AVIATION ADMIN. (Jan. 17, 2020), https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/.

testing all employees, regardless of age and job performance, is justified by business necessity.³⁰¹

Consequently, as a rule, employers should neuropsychological testing only for individuals who exhibit job performance problems that may be associated with cognitive deficits. It is not impossible that a court would support a policy of testing all individuals whose work is intellectually challenging and of high impact, such as physicians, just as exceptions are made for individuals in public-safety positions.³⁰² Yet even a court that is sympathetic to employers should insist that the tests be validated, structured to avoid disparate impact to the extent possible, and tailored to the relevant job skills to meet the business necessity standard.³⁰³

2. Cost and Employee Buy-in

Testing all employees may be prohibitively expensive for employers. 304 Thorough testing that lasts several hours costs hundreds of dollars. 305 Private and public health insurers are unlikely to cover the cost of testing individuals who have no symptoms that signal a need for testing. 306 Insurers generally cover only "medically necessary" treatments and diagnostic procedures. 307 Thus, employers would have to bear the cost. 308

In addition, employees are likely to be unenthusiastic and even resentful of a testing requirement, especially one that applies at any age.³⁰⁹ They may view testing as cumbersome, stressful, and

^{301.} See supra notes 227, 229-30 and accompanying text.

^{302.} See supra notes 298–300 and accompanying text.

^{303.} See supra notes 227–30 and accompanying text.

^{304.} Hoffman, supra note 289, at 177.

^{305.} See id. (citing \$1,000 as the price for a "bare bones cognitive battery"); Counseling and Psychological Testing, ETHERIDGE PSYCH., https://www.etheridgepsychology.com/price-list (last visited Feb. 14, 2022) (advertising neuropsychological evaluation for \$900); Psychological Assessment and Testing, UCLA PSYCH., https://www.psych.ucla.edu/centers-programs/clinic/psychological-assessment-testing (last visited Feb. 14, 2022) (advertising three-hour dementia screening for \$350).

^{306.} Hoffman, supra note 289, at 178; Christopher Melton, Medical Necessity and False Claims: The Intersection of Clinical Decisionmaking and Liability, 22 J. HEALTH CARE COMPLIANCE 23, 24 (2020) ("[T]he medical necessity of billed services is an explicit condition for their payment by the government."); Mark A. Hall & Gerard F. Anderson, Health Insurers' Assessment of Medical Necessity, 140 U. Pa. L. Rev. 1637, 1640–41 (1992) (stating that terms such as "medical necessity" determine health insurance coverage).

^{307.} Hall & Anderson, *supra* note 306, at 1640–41.

^{308.} Enforcement Guidance on Disability-Related Inquiries, supra note 297.

^{309.} Hoffman, *supra* note 289, at 174 ("No one likes to be told he or she must submit to a medical examination, let alone a mental capacity examination.").

demeaning. They may also feel that their employers do not trust and value them and are continually looking for evidence of mental deficits.

One final concern bears repeating. Many employees may worry about the privacy of their test results and about what adverse actions they may trigger. Concern could deepen as employers obtain increasing amounts of information through repeated testing. Employers will learn if there is any deviation from workers' initial test scores and may subject them to special scrutiny or seek to eliminate them from the workforce, even if they are still performing well.

D. Testing Employees for Alzheimer's Disease Biomarkers

New technologies enable clinicians to measure Alzheimer's disease biomarkers to determine whether individuals are at high risk of developing dementia.³¹¹ These include PET scans, spinal taps, blood tests, and genetic tests.³¹² This Subpart will assess the degree to which the law restricts the use of such tools.

1. ADA Constraints

The ADA generally does not permit employers to subject employees to predictive testing.³¹³ All testing must be "job-related and consistent with business necessity," which means that it must relate to individuals' current ability to perform the job, not to how their ability might be transformed in the future.³¹⁴ Seeking information about individuals' risks of developing cognitive decline in later years is not justified by business necessity because there is no certainty that deficits will actually develop or that tested employees will still be working for the employer if cognitive problems do arise.³¹⁵ Furthermore, recall that under the ADA, a worker poses a direct threat only in cases of a "significant risk of substantial harm to the health or safety of the individual or others that cannot be eliminated or reduced by reasonable accommodation."³¹⁶ No such risk exists before even the earliest cognitive symptoms are evident, and thus predictive testing should be impermissible.

^{310.} See supra Subpart IV.B.4.

^{311.} See supra Subpart I.C.

^{312.} See supra Subpart I.C.

^{313. 42} U.S.C. § 12112(d)(4)(A); see supra note 297 and accompanying text.

^{314. 42} U.S.C. § 12112(d)(4)(A); Enforcement Guidance on Disability-Related Inquiries, supra note 297.

^{315.} See supra notes 85, 89, 93 and accompanying text (explaining that some tests are designed to detect Alzheimer's disease biomarkers many years before symptoms emerge but that the presence of such biomarkers does not guarantee that the disease will manifest).

^{316. 29} C.F.R. § 1630.2(r) (2021). See *supra* Subpart III.B.3 for a discussion of direct threat.

The EEOC has explained that employers may test workers in public safety jobs periodically to ensure that they are not at imminent risk of health problems such as heart attacks or strokes that could impede their job performance in a manner that endangers the people they serve.³¹⁷ Such tests, however, are different from the Alzheimer's disease biomarker tests at issue in this Subpart. Discovering that a police officer's blood pressure reading raises concerns about an imminent stroke could directly benefit the public.³¹⁸ By contrast, determining that it is possible that a person will suffer cognitive decline at some point in the future provides no conclusive information regarding immediate hazards. Instead, employers should remain vigilant about their workers' job performance and detect cognitive difficulties if they emerge.

2. The Limits of ADA Protections

It is important to understand that although employers are precluded from seeking predictive information from employees, the law does not forbid them to use the data if they come to possess it.³¹⁹ For example, if an employee volunteers that she underwent testing that revealed beta-amyloid protein buildup, no ADA provision prevents the employer from terminating her based on concern that she will develop a mental disability in the future.³²⁰ The ADA protects individuals who have current or past disabilities or who are perceived as having a current physical or mental impairment.³²¹ But, as I have argued in prior work, the law does not cover circumstances in which an employer believes the person is currently healthy but might develop a disability in the future.³²² This legislative gap is becoming increasingly worrisome as the development of predictive tools accelerates.³²³

Moreover, there are two circumstances in which employers would be authorized to test for Alzheimer's disease biomarkers. Employers who believe, based on concrete evidence, that an employee is suffering from cognitive problems that are adversely affecting job performance should be able to require physiological testing, such as the PrecivityAD blood test, to determine if a worker currently has signs

^{317.} See Enforcement Guidance on Disability-Related Inquiries, supra note 297.

^{318.} See id.

^{319.} See Sharona Hoffman, Big Data and the Americans with Disabilities Act, 68 HASTINGS L.J. 777, 779 (2017).

^{320.} See id.

^{321. 42} U.S.C. § 12102(1); see supra Subpart III.B.1 (discussing the definition of "disability" in the ADA).

^{322.} Hoffman, *supra* note 319, at 779.

^{323.} *Id.* at 784–86 (discussing disease prediction and the risk of employment discrimination).

of Alzheimer's disease.³²⁴ However, the available diagnostic tools are extremely expensive, and employers are more likely to rely on cognitive testing instead.³²⁵ In addition, the ADA permits biomarker testing during the interval between receipt of a bona fide job offer and the worker's start date, so long as all accepted applicants undergo the same testing.³²⁶ The tests' current cost and their predictive uncertainties, however, make it unlikely that many employers will pursue this option for the time being.³²⁷

3. The Genetic Information Nondiscrimination Act

As for genetic testing, it is out of the question for employers because of the Genetic Information Nondiscrimination Act ("GINA").³²⁸ This law bars employers from engaging in genetic-based discrimination.³²⁹ Employers cannot seek genetic information about workers through testing or otherwise.³³⁰ Moreover, employers are barred from using any genetic data they happen to possess to demote, terminate, or otherwise discriminate against employees.³³¹ Thus, an employer could not fire a worker because the individual's genetic data reveal vulnerability to future cognitive decline.³³²

E. Permitted Cognitive Testing and Employment Actions

While employers are restricted with respect to medical inquiries and exams, the ADA does not forbid or even discourage testing at all times.³³³ Indeed, it may be important to obtain medical evidence as to whether an individual remains qualified for the job in question or will pose a direct threat in the workplace.³³⁴ This Subpart examines the circumstances under which testing is lawful, along with employers' obligations if testing reveals cognitive decline.

333. *Id.* § 12112(d)(4)(A).

^{324.} See supra notes 90–93 and accompanying text.

^{325.} See supra note 92 and accompanying text; see also supra Subpart I.B (discussing cognitive testing).

^{326. 42} U.S.C. § 12112(d)(3); see also supra notes 212–14 and accompanying text.

^{327.} See supra notes 89, 92 and accompanying text

^{328.} Genetic Information Nondiscrimination Act of 2008, Pub. L. No. 110-233, 122 Stat. 881 (codified as amended in scattered sections of Titles 29 & 42 of the United States Code).

^{329. 42} U.S.C. § 2000ff-1(a).

^{330.} *Id.* § 2000ff-1(b). Genetic information is defined as including (i) an individual's genetic tests, (ii) the genetic tests of an individual's family members, and (iii) the manifestation of a disease or disorder in an individual's family members. *Id.* §§ 2000ff(4)(A)(i)–(iii).

^{331.} *Id.* § 2000ff-1(a).

^{332.} *Id*.

^{334.} Id. §§ 12111(8), 12112(a), 12113(b).

1. Lawful Testing

Employers may require employees who are exhibiting current job performance problems to consult a physician neuropsychological assessment.³³⁵ ADA jurisprudence includes numerous cases in which employers lawfully required employees to pursue cognitive testing. For example, in Stern v. St. Anthony's Health Center, 336 with which this Article opened, St. Anthony's required Dr. Stern to undergo a fitness-for-duty examination after he exhibited signs of cognitive decline.³³⁷ Likewise, in *Duignan v. City* of Chicago, 338 the defendant appropriately directed the plaintiff, a police officer, to undergo psychological testing because of conduct that occurred while she was in a paranoid delusional state stemming from her Huntington's disease.339

Employers can require an employee to undergo examination by a healthcare provider that the employer selects.³⁴⁰ Employers need not defer to a worker's choice of clinician.³⁴¹ But employers must pay the cost of services provided by the clinicians they choose.³⁴²

If testing is conducted, the selected screening tool or tools must be provably appropriate for discerning whether an individual can perform the job tasks in question.³⁴³ The cognitive abilities required for one profession may not be the same as those needed for other professions.³⁴⁴ In addition, not all cognitive tests are equally reliable.³⁴⁵ Employers must be careful to refer employees to experts

^{335.} See Enforcement Guidance on Disability-Related Inquiries, supra note 297.

^{336. 788} F.3d 276 (7th Cir. 2015).

^{337.} Id. at 281–82.

^{338. 275} F. Supp. 3d 933 (N.D. Ill. 2017).

^{339.} Id. at 935–36.

^{340.} See Enforcement Guidance on Disability-Related Inquiries, supra note 297.

^{341.} See id.

^{342.} See id.

^{343.} Employment Tests and Selection Procedures, supra note 222 ("Employers should ensure that employment tests and other selection procedures are properly validated for the positions and purposes for which they are used."); see CAL. PUB. PROT. & PHYSICIAN HEALTH, INC., supra note 259, at 18 (noting that proper screening "requires attention to the choice of the evaluator, the screening instrument(s) used, and the process the evaluator follows").

^{344.} Katrina A. Armstrong & Eileen E. Reynolds, *Opportunities and Challenges in Valuing and Evaluating Aging Physicians*, 323 JAMA 125, 126 (2020) ("[R]esearch is needed to determine what assessments best predict [physicians"] clinical outcomes."); Hoffman, *supra* note 289, at 177 ("The cognitive tools required to be a stand-up comic, for example, are likely to be quite different than those required to be a judge.").

^{345.} See Shen, supra note 7, at 297–304 (discussing various assessment tools and their strengths and weaknesses); Kelvin K. F. Tsoi et al., Cognitive Tests to Detect Dementia: A Systematic Review and Meta-analysis, 175 JAMA INTERNAL MED. 1450, 1455–57 (2015).

who can choose suitable tests.³⁴⁶ As the workforce ages and employers increasingly seek cognitive testing for low performers, the testing industry may need to increase and refine its offerings so that examinations more directly relate to different work competencies.³⁴⁷

Employers are also permitted to conduct almost limitless examinations, including neuropsychological testing, during the window of time between extending a bona fide job offer and the commencement of employment, so long as all accepted applicants undergo the same testing.³⁴⁸ As I have argued in prior work, the distinction between preemployment and postemployment testing makes little sense, and there is no reason for employers to obtain information that is not illuminating as to whether individuals can perform their jobs.³⁴⁹ For example, employers need not know that there is some possibility that a worker will develop dementia in several years or decades.³⁵⁰

Some employers for whom mental acuity is a priority may wish to conduct testing in order to identify existing cognitive deficits that did not become apparent during the application process. Others may wish to have baseline scores to which they could compare later scores for weak performers with suspected dementia who undergo assessments.³⁵¹ But testing all entering employees could be very expensive for employers and could generate resentment on the part of those who are asked to take cognitive tests.³⁵² Employers could also risk facing charges of disparate impact or disability discrimination if employees believe that they were disadvantaged because of their scores.³⁵³

2. Reasonable Accommodation

Testing outcomes indicating an employee has a cognitive disability that impedes job performance will trigger the employer's duty of reasonable accommodation under the ADA.³⁵⁴ Ideally, therefore, cognitive testing should pave a path for problem-solving and prolonging employees' working lives. The assessment of whether

^{346.} See Shen, supra note 7, at 294–96 (discussing matters that should be considered in developing a cognitive testing "toolbox" for judges).

^{347.} *Id.* at 291 ("To develop an effective tool for assessing capacity in the judicial brain, we need to first wrestle with the question: Capacity to do what?").

^{348. 42} U.S.C. § 12112(d)(3); see also supra notes 212–14 and accompanying text.

^{349.} Hoffman, *supra* note 215, at 519.

^{350.} See supra notes 85, 93 and accompanying text.

^{351.} AM. PSYCH. ASS'N, APA GUIDELINES FOR THE EVALUATION OF DEMENTIA AND AGE-RELATED COGNITIVE CHANGE 15 (2021), https://www.apa.org/practice/guidelines/guidelines-dementia-age-related-cognitive-change.pdf (discussing baseline testing).

^{352.} See supra Subpart IV.C.2.

^{353.} See supra Subparts IV.B.2, IV.B.3.

^{354.} See supra Subpart III.B.4.

an employee can be accommodated should be based on multiple layers of information, including the individual's job performance record; conversations with the employee, supervisors, and perhaps medical experts; cognitive testing results; and any other available data.³⁵⁵

The Job Accommodation Network offers many suggestions for accommodating individuals with cognitive decline.³⁵⁶ It advises that employers do the following to assist workers with memory problems:

- Use [a] voice activated recorder to record verbal instructions
- Provide written information
- Provide checklists
- Prompt employee[s] with verbal cues (reminders)
- Post written or pictorial instructions on frequently-used machines.³⁵⁷

British researchers who conducted a comprehensive literature review compiled an additional list of potential accommodations:

- Changing work schedules, or reducing hours
- Arranging meetings for times when employees are likely to be at their best
- Simplifying routines, and allocating tasks separately instead of all at once
- Reducing noise and distraction
- Using technology (e.g.[,] computerized diaries) to function as reminders of meetings and deadlines
- Moving to a less senior role and accepting a lower wage and less responsibility
- Having one or two colleagues as supporters
- Assistance with planning for the future e.g.[,] deciding when the time is right to leave work
- Identify who else in the workplace needs to know about the diagnosis (clients as well as co-workers).³⁵⁸

It is acceptable for an employer to demote an individual with cognitive difficulties if that is the best way to enable the individual to

^{355.} Armstrong & Reynolds, *supra* note 344, at 126 (discussing the "multiple sources of information" that are needed to evaluate physicians' abilities to perform their job).

^{356.} Job Accommodation Network, Intellectual or Cognitive Impairments 3, 8 (2011), https://thearc.org/wp-content/uploads/forchapters/JAN%20Accommodation%20and%20Compliance%20Series.pdf.

^{357.} *Id.* at 8; see also About Alzheimer's Disease, JOB ACCOMMODATION NETWORK, https://askjan.org/disabilities/Alzheimer-s-Disease.cfm (last visited Feb. 15, 2022) (providing suggestions for accommodations that address executive functioning deficits, time-management problems, memory loss, and difficulties with organization/planning/prioritization).

^{358.} Louise Thomson et al., Managing Employees with Dementia: A Systematic Review, 69 Occupational Med. 89, 94 (2019).

continue working.³⁵⁹ It is often unpleasant for managers to initiate demotions, so they may hesitate to do so, but a lower level of responsibility for the employee may be an ideal solution in cases of cognitive decline.³⁶⁰ The ADA itself lists job restructuring, adjusted work schedules, part-time work, and reassignment to a different position as potential accommodations.³⁶¹ It does not preclude a change of title and salary as a consequence of such modifications.³⁶² The EEOC confirms that appropriate reductions in salary may accompany reassignments.³⁶³

Courts have denied employers summary judgment when questions exist as to whether the employers have made adequate efforts to identify and implement reasonable accommodations. In one case, Carrico v. CNA Insurance, 364 a staff attorney suffered a brain injury in a car accident and developed a lasting cognitive impairment.³⁶⁵ The court found that there was a genuine issue of material fact as to whether the defendant violated the California Fair Employment and Housing Act, 366 whose reasonable accommodation provision closely resembles the ADA's, when it failed to temporarily reduce the plaintiff's caseload. 367 In Foster v. City of Oakland, 368 the plaintiff, a recreation specialist, had "difficulties with word retrieval, sequencing, . . . multi-tasking and irritability" after a head injury. 369 The court ruled that a triable issue of fact existed as to whether the defendant met its reasonable accommodation obligation when it required the plaintiff to continue running two recreation centers by himself but offered him help with budgeting issues.³⁷⁰

Note that if cognitive decline is mild, it may not rise to the level of a disability.³⁷¹ Under the ADA, only conditions that substantially

^{359.} Jeff Hyman, Second Chances: Demote Them Before You Fire Them, FORBES (Aug. 29, 2018, 2:39 PM), https://www.forbes.com/sites/jeffhyman/2018/08/29/demote/?sh=598b3323195d.

^{360.} *Id.* (noting that according to one report, 54 percent of human resources professionals stated that their company had never demoted an employee (citing *Nearly Half of HR Managers Say Their Companies Have Demoted an Employee*, CISION: PR NEWSWIRE (Aug. 9, 2018))); *see also How Common Are Demotions at Work?*, CONN. Bus. & Indus. Ass'n (Aug. 15, 2018), https://www.cbia.com/news/hrsafety/workplace-demotions/ (reporting that only 3 percent of individuals who are fifty-five or older have their positions downgraded).

^{361. 42} U.S.C. § 12111(9)(B).

^{362.} Id.

^{363.} Enforcement Guidance on Reasonable Accommodation, supra note 204.

^{364.} No. LA CV18-01445, 2020 WL 5797698 (C.D. Cal. June 1, 2020).

^{365.} *Id.* at *2, *5.

^{366.} CAL. GOV'T CODE § 12940(m)(1) (West 2022).

^{367.} Carrico, 2020 WL 5797698, at *15, *18.

^{368. 649} F. Supp. 2d 1008 (N.D. Cal. 2009).

^{369.} Id. at 1012, 1014.

^{370.} Id. at 1023.

^{371.} See 42 U.S.C. § 12102(1).

limit a major life activity are disabilities.³⁷² However, the ADA's "regarded as" provision prohibits employers from discriminating against employees whom they regard as having impairments, such as those with mild cognitive deficits that are not fully disabling.³⁷³ At the same time, employers are not required to accommodate conditions that are not disabilities.³⁷⁴ To illustrate, employers cannot terminate employees based on their having nondisabling, mild cognitive decline so long as the employees are performing satisfactorily. But employers need not reduce such employees' workloads as accommodations to make jobs easier for them. Admittedly, there is no clear line between disabling and nondisabling cognitive impairments. An employer that does not wish to accommodate a worker with cognitive deficits because it believes the condition is not severe enough to constitute a disability may face legal battles. On the other hand, workers who wish to challenge employers' refusal to accommodate them would be in the awkward position of having to argue that their deficits are worse than employers think they are. Doing so could otherwise disadvantage the employees and may not be an approach many choose to take.

3. Termination of Employment

Employers are permitted to terminate employees who cannot fulfill their job duties if no reasonable accommodations are available.³⁷⁵ The ADA does not aim to propagate incompetent workforces or the retention of employees who are a danger to themselves or others.³⁷⁶ In fact, in some cases, it would be irresponsible for employers to retain workers who could cause harm to clients, customers, or patients. Employers with incompetent employees potentially risk malpractice liability and other severe consequences.

Thus, in *Stern v. St. Anthony's Health Center*, the appellate court held that the defendant was justified in firing Dr. Stern because no reasonable accommodation would have enabled the cognitively impaired psychologist to perform the essential functions of his job.³⁷⁷

373. *Id.* § 12102(3)(A) ("An individual meets the requirement of 'being regarded as having such an impairment' if the individual establishes that he or she has been subjected to an action prohibited under this chapter because of an actual or perceived physical or mental impairment whether or not the impairment limits or is perceived to limit a major life activity.").

^{372.} Id.

^{374.} *Id.* § 12201(h).

^{375.} Employers and the ADA: Myths and Facts, OFF. OF DISABILITY EMP. POL'Y, U.S. DEP'T OF LAB., https://www.dol.gov/agencies/odep/publications/fact-sheets/americans-with-disabilities-act (last visited Feb. 15, 2022) (explaining the circumstances under which employers may fire employees with disabilities).

^{376.} Persons with Intellectual Disabilities, supra note 196.

^{377.} Stern v. St. Anthony's Health Ctr., 788 F.3d 276, 292–93 (7th Cir. 2015).

Similarly, in *Adams v. District of Columbia*, ³⁷⁸ the court granted the defendant's motion for summary judgment because the plaintiff, an information technology specialist who had suffered a stroke, would not be able to perform the essential functions of his job even if he were allowed to work from home, as he requested. ³⁷⁹

Tenured professors are no exception, and they too can be fired if they can no longer perform their jobs competently with or without accommodation.³⁸⁰ Tenure entitles professors to due process but not to lifetime employment regardless of the quality of their work.³⁸¹ Some universities have detailed policies specifying grounds and procedures for termination of tenured professors.³⁸² For-cause discharge of tenured academics is rare, but universities need not retain faculty members who are in fact incapable of providing a quality education to their students or fulfilling other professional duties.³⁸³

V. STATUTORY REVISIONS

While most of the antidiscrimination laws' guidance is balanced and sound, the emergence of predictive cognitive testing capabilities necessitates two changes to the ADA. The statute should prohibit discrimination based on predictions of future illness and should disallow preemployment testing that is not job-related.

A. Expanding the Definition of Disability

New testing technologies, such as PET scans, spinal taps, and blood tests, can enable employers to learn that individuals are at risk

380. Rabban, supra note 6, at 39–40; 1940 Statement of Principles on Academic Freedom and Tenure, Am. Ass'n of Univ. Professors, https://www.aaup.org/report/1940-statement-principles-academic-freedom-and-tenure (last visited Feb. 15, 2022) (stating that the services of those with academic tenure "should be terminated only for adequate cause"); Termination & Discipline (2004), Am. Ass'n of Univ. Professors (Oct. 24, 2004) [hereinafter Termination & Discipline], https://www.aaup.org/issues/appointments-promotions-discipline/termination-discipline-2004 (outlining grounds for dismissal, including immoral behavior, neglect of duty, incompetence, and ethical misconduct).

^{378. 50} F. Supp. 3d 47 (D.D.C. 2014).

^{379.} *Id.* at 57.

^{381.} Termination & Discipline, supra note 380.

^{382.} See generally, e.g., Univ. Cal., Off. President, General University Policy Regarding Academic Employees: APM – 075 – Termination for Incompetent Performance (2020), https://www.ucop.edu/academic-personnel-programs/files/apm/apm-075.pdf; Board of Regents Policy Manual, 8.3.9 Discipline and Removal of Faculty Members, Univ. Sys. Ga., https://www.usg.edu/policymanual/section8/C245/#p8.3.9_discipline_and_removal_of_faculty_members (last visited Feb. 15, 2022).

^{383.} Rabban, *supra* note 6, at 39–40, 53.

2022]

of developing dementia in the coming years or decades.³⁸⁴ The ADA was enacted in 1990,³⁸⁵ and, based on the diagnostic tools that were available at the time, the statute sensibly focused on existing and past disabilities.³⁸⁶ Yet, over thirty years later, the possibility of discrimination based on predictions of future illness can no longer be ignored. Consequently, the statutory scope must be extended to cover individuals who are currently healthy but are subject to adverse action because employers believe they are at risk of developing health problems. A simple and effective modification is to revise the "regarded as" prong of the definition of "disability" to include individuals "who are perceived as likely to develop physical or mental impairments in the future."³⁸⁷

This change would align the ADA with GINA, which prohibits discrimination based on predictive genetic information.³⁸⁸ Now that health predictions can be made by means other than genetic testing, it makes little sense to prohibit discrimination based on genetic variants but not other disease biomarkers.³⁸⁹

The proposed amendment would provide much-needed protection to employees who undergo predictive testing. Employers are highly incentivized to avoid the risks of productivity problems, liability arising from employee mistakes, and large medical costs that sick employees might generate.³⁹⁰ They also may be eager to use test outcomes as an excuse to eliminate older, more highly paid employees in order to hire more junior workers who will accept lower salaries. Without a statutory prohibition, it may be quite tempting for employers who learn of test results indicating dementia susceptibility to terminate or reject employees no matter how well they can currently function in the workplace.

B. Modifying the ADA's Testing Guidelines

More puzzling than the gap in the ADA's definition of disability is the ADA's distinction between preemployment and postemployment testing.³⁹¹ During an employee's tenure, testing is restricted to examinations that are "job-related and consistent with business necessity," but this limitation does not apply to testing conducted during the interval between a worker's job offer and start

^{384.} See supra Subpart I.C.

^{385.} Introduction to the ADA, U.S. DEP'T OF JUST., CIV. RTS. DIV., https://www.ada.gov/ada_intro.htm (last visited Feb. 15, 2022).

^{386. 42} U.S.C. § 12102(1) (defining "disability").

^{387.} Hoffman, *supra* note 319, at 787.

^{388. 42} U.S.C. § 2000ff-1.

^{389.} Hoffman, *supra* note 319, at 788–89.

^{390.} Id. at 779.

^{391. 42} U.S.C. \S 12112(d)(2)–(4); see also supra notes 212–18 and accompanying text.

date.³⁹² It is difficult to understand why the drafters believed an employer might need information about incoming workers that is not job-related.

Now that such information can include risk assessments for future dementia, it is particularly critical that this distinction be eliminated. Without changes to the definition of disability (as suggested above) and the medical examinations standard, employers would be able to test for dementia biomarkers and then withdraw employment offers from individuals who might develop future cognitive decline, no matter how qualified they are to perform the job at present.³⁹³ Moreover, employers would not need to conduct costly testing themselves if testing was previously done and is documented in an individual's medical record. Employers can simply ask incoming workers to sign authorizations for release of their medical records, and such requests are commonly made. 394 Consequently, the ADA's medical inquiry and examination standard for incoming employees should be identical to the standard for those who are already employed, and all testing that is not job-related should be categorically prohibited.³⁹⁵

VI. ADDITIONAL RECOMMENDATIONS

It is critical for both employers and employees to do their part to ensure that workers with cognitive deficits are accommodated if at all possible and that workplaces remain safe and productive. Professional associations can also make significant contributions to addressing the challenges of cognitive decline in the workplace. Below are detailed recommendations for workers, their employers, and professional associations.

A. The Employee's Role

Employees who are concerned that they may be experiencing cognitive decline should consult their physicians and undergo testing.³⁹⁶ If cognitive deficits are indeed evident, individuals should discuss their ability to work with their doctors and consult them as to whether any accommodations could be of help.³⁹⁷

^{392. 42} U.S.C. § 12112(d)(3)–(4).

^{393.} See supra Subpart V.A. Employers could also conduct extensive neuropsychiatric assessments, but they would violate the ADA's antidiscrimination mandate if they withdraw job offers from individuals who could perform their jobs but are wrongly perceived as having mental impairments because of their scores. See supra notes 372–74 and accompanying text.

^{394.} Hoffman, supra note 319, at 780.

^{395.} Hoffman, supra note 215, at 519.

^{396.} See supra Subpart I.B (discussing cognitive testing).

^{397.} Diane Blum, *I've Just Been Diagnosed with Alzheimer's. Can I Still Work?*, ALZHEIMER'S ASS'N (Mar. 31, 2014), https://www.alzheimersblog.org/2013/05/21/ive-diagnosed-alzheimers-work/.

Employees face a dilemma with respect to disclosure of their condition. Certainly, it can be very uncomfortable to discuss the matter with employers, and workers may render themselves vulnerable to scrutiny, suspicion, stigmatization, and adverse employment decisions.³⁹⁸ But nondisclosure can be much worse. Doctors with cognitive deficits could injure patients, lawyers could lose cases, and most professionals could cause harm to their clients and customers if they perform poorly. Harmful mistakes can lead to guilt, job loss, and legal liability.

Individuals who are aware of cognitive decline that is affecting their job performance or could soon do so should approach their employers and request accommodation.³⁹⁹ Experts caution that workers should initiate discussion with employers before their performance begins to suffer and they find themselves subject to criticism or disciplinary action.⁴⁰⁰

Many employers know little about dementia.⁴⁰¹ Employees may be wise to refer employers to educational materials, such as literature prepared by the Job Accommodation Network.⁴⁰²

People with early onset Alzheimer's disease or other dementias who cannot work safely and effectively even with accommodations may be able to obtain income and healthcare coverage through federal safety net programs or private insurance. Those who develop the disease before the age of sixty-five are considered to have early onset Alzheimer's disease. The Social Security Administration includes early onset Alzheimer's disease, frontotemporal dementia, Lewy body dementia, and other dementias in its Compassionate Allowances ("CAL") initiative. The CAL initiative enables those with listed conditions to have expedited access to Social Security Disability

401. *Id.*; Blum, *supra* note 397. See *infra* Subpart VI.B.1 for discussion of the need for training.

^{398.} Andrew Soergel, *Businesses Navigate Dementia Conversations with Older Workers*, CLAIMS J. (Jan. 30, 2019), https://www.claimsjournal.com/news/national/2019/01/30/288957.htm ("For some, disclosing dementia to an employer could open the door to workplace adjustments. For others, there's fear of stigmatization or even termination.").

^{399.} Kathleen Allen, *Alzheimer's and Employment*, BRIGHTFOCUS FOUND. (Jan. 16, 2020), https://www.brightfocus.org/alzheimers/article/alzheimers-and-employment.

^{400.} Id.

^{402.} See generally Job Accommodation Network, supra note 356.

^{403.} Social Security Disability, ALZHEIMER'S ASS'N, https://www.alz.org/help-support/caregiving/financial-legal-planning/social-security-disability (last visited Feb. 15, 2022); USI Affinity, Disability Insurance Helps to Protect Your Income, 22 LAWS. J. 5, 5 (Feb. 28, 2020).

^{404.} Early Onset Alzheimer's Disease, HEALTHLINE (Dec. 21, 2016), https://www.healthline.com/health/alzheimers-disease/early-onset-alzheimers.

^{405.} Social Security Disability, supra note 403.

Insurance and Supplemental Security Income.⁴⁰⁶ In addition, some employers offer disability insurance that will cover employees who must stop working because of dementia.⁴⁰⁷

B. The Employer's Role

Employers have the most important role to play in addressing the challenges of cognitive deficits in the workplace. This Subpart develops recommendations for the following interventions: (1) employer training regarding cognitive decline, (2) inclusion of opportunities to obtain preliminary cognitive testing and education about dementia in workplace wellness programs, and (3) careful attention to assessing all workers' job performance at regular intervals and responding to suspected and confirmed cases of cognitive decline appropriately.

1. Training

Contemporary employers commonly provide training to their managers and supervisors on topics such as sexual harassment and diversity. As the American workforce ages, employers should add training about cognitive decline to their initiatives. Workplace training programs are often criticized for being ineffective or even counterproductive. It is important that training about cognitive deficits be developed, validated, and conducted by highly skilled professionals in the areas of gerontology, psychology, human

^{406.} *Id.*; Compassionate Allowances, Soc. Sec. Admin., https://www.ssa.gov/compassionateallowances/ (last visited Feb. 15, 2022); see also Brandy Bauer, SSI vs. SSDI: The Differences, Benefits, and How to Apply, NAT'L COUNCIL ON AGING (Nov. 23, 2020), https://www.ncoa.org/article/ssi-vs-ssdi-what-are-these-benefits-how-they-differ (explaining Social Security Insurance and Social Security Disability Insurance).

^{407.} Insurance, Alzheimer's Ass'n, https://www.alz.org/help-support/caregiving/financial-legal-planning/insurance (last visited Feb. 15, 2022).

^{408.} See Edward H. Chang et al., Does Diversity Training Work the Way It's Supposed to?, Soc'y for Hum. Res. Mgmt. (July 18, 2019), https://www.shrm.org/resourcesandtools/hr-topics/employee-relations/pages/how-to-make-diversity-training-work-aspx ("Virtually all Fortune 500 companies offer diversity training to their employees."); Ellen Feeney, The Importance of Effective Sexual Harassment Prevention Training, ADP, https://www.adp.com/spark/articles/2020/01/the-importance-of-effective-sexual-harassment-training.aspx (last visited Feb. 15, 2022).

^{409.} Julia Carpenter, When Workplace Trainings Can Backfire, CNN MONEY (Jan. 29, 2018), https://money.cnn.com/2018/01/29/pf/diversity-harassment-trainings/index.html; Frank Dobbin & Alexandra Kalev, The Promise and Peril of Sexual Harassment Programs, 116 Proc. NAT'L ACAD. Sci. 12255, 12255 (2019); Frank Dobbin & Alexandra Kalev, Why Diversity Programs Fail, HARV. Bus. Rev. July-Aug. 2016, at 52, 52–60.

resources, and law.⁴¹⁰ Input from older employees and advocacy organizations such as AARP and the Alzheimer's Association would also be valuable. While some educational materials already exist,⁴¹¹ experts should continue to develop training programs that are engaging and interactive.

Training should equip employers to identify job performance problems that are potentially associated with cognitive deficits, engage in conversations with employees in a sensitive manner, determine which, if any, accommodations are appropriate, and comply with legal requirements. To that end, supervisors and managers should learn about dementia symptoms⁴¹² and the requirements of all relevant laws.⁴¹³

It is important that training and discussion of cognitive decline not generate a hostile environment and harassment for older workers. 414 For this reason, I recommend that training be restricted to supervisors and managers rather than to all employees. Only those in a position to intervene need to undergo training, and programs should emphasize the need to be supportive and find accommodations if at all possible. They should also explain that age-based harassment is itself legally actionable. 415

Training can provide ample advice that will facilitate decision making. For example, the Job Accommodation Network advises employers to consider the following questions to identify appropriate accommodations:

- What limitations is the employee experiencing?
- How do these limitations affect the employee and the employee's job performance?
- Which specific job tasks are impacted by the employee's limitations?
- Are there any accommodations that could minimize or eliminate job performance problems?
- Is the employer utilizing all available resources to identify and consider potential accommodations?
- Has the employee been consulted regarding possible accommodations?
- Once accommodations are in place, would it be useful to meet with the employee to evaluate the effectiveness of

414. *See supra* notes 171–73.

^{410.} Developing detailed blueprints for training programs is beyond the scope of this Article.

^{411.} Workplace Education Program, Alzheimer's Ass'n, https://www.alz.org/wi/helping-you/education-programs/workplace-education-program (last visited Feb. 14, 2022); see supra note 402 and accompanying text.

^{412.} See supra note 55 and accompanying text.

^{413.} See supra Part III.

^{415.} *See supra* notes 171–73.

the accommodations and to determine whether additional accommodations are needed?⁴¹⁶

Other experts emphasize the importance of observing employees, recording problems, and discussing specific performance shortcomings with them rather than vague or general concerns. It is also vital to maintain compassion for employees who are struggling at work. These suggestions and others, along with simulations and trainer feedback, could help employers navigate the very difficult terrain of cognitive deficits.

2. Wellness Programs

Employers could offer basic cognitive testing to older employees through wellness programs. In 2019, 84 percent of employers with two hundred or more employees that offered health benefits had workplace wellness programs. Short tests, such as the MMSE or the MoCA, could be conducted online or by qualified professionals who would advise workers with scores that raise concern to visit their doctors and seek more thorough testing. Employees should be informed, however, that brief cognitive testing is of limited reliability and should not cause panic and that sometimes cognitive deficits are caused by treatable problems, such as drug side effects. 421

Voluntary cognitive testing that is available through wellness programs would be consistent with federal antidiscrimination laws. The ADA explicitly permits employers to offer wellness programs that include medical inquiries and testing.⁴²² All individually identifiable testing results must remain confidential and may not be shared with the employer.⁴²³ It is also appropriate to offer the testing option only to older workers (e.g., starting at the age of seventy). The ADEA does not cover reverse discrimination, so it is not unlawful to deprive

^{416.} Job Accommodation Network, *supra* note 356, at 7.

^{417.} Tia Benjamin, How to Deal with a Senior Employee Who Is Becoming More Forgetful, Hous. Chron., https://smallbusiness.chron.com/deal-senior-employee-becoming-forgetful-17941.html (last visited Jan. 4, 2022).

^{418.} Fleck, supra note 27.

^{419.} Karen Pollitz & Matthew Rae, Trends in Workplace Wellness Programs and Evolving Federal Standards, KAISER FAM. FOUND. (June 9, 2020), https://www.kff.org/private-insurance/issue-brief/trends-in-workplace-wellness-programs-and-evolving-federal-standards/.

^{420.} See supra notes 71–72 and accompanying text (discussing a variety of cognitive tests).

^{421.} See supra notes 65–67, 78–80.

^{422. 42} U.S.C. § 12112(d)(4)(B).

^{423.} Id. § 12112(d)(4)(C); EEOC's Final Rule on Employer Wellness Programs and Title I of the Americans with Disabilities Act, U.S. EQUAL EMP. OPPORTUNITY COMM'N, https://www.eeoc.gov/regulations/eeocs-final-rule-employer-wellness-programs-and-title-i-americans-disabilities-act (last visited Feb. 15, 2022).

younger employees of a testing opportunity that is available to those who are older.424

Voluntary testing for which the employer pays would help individuals who are worried about cognitive decline determine whether their concerns are justified. It would provide assurance to those without deficits and encourage others to pursue further assessments. A medical diagnosis of cognitive decline would enable employees to request accommodations, ideally prolonging their ability to work productively and safely.

In addition, wellness programs could offer educational sessions about dementia. The Alzheimer's Association has developed one-hour modules with titles such as "10 Warning Signs of Alzheimer's" and "Dementia Conversations: Driving, Doctor Visits, Legal and Financial Planning."425 This information could help workers determine whether they should seek testing and provide guidance to those who are diagnosed with cognitive deficits. 426

3. Taking Appropriate Action

Employers should not establish mandatory retirement ages (unless explicitly permitted to do so by law) and should not require all employees to undergo cognitive testing beginning at a certain age. 427 They also should not require the entire workforce to obtain periodic cognitive testing or test workers for predictive dementia biomarkers.⁴²⁸ Instead, they must pursue a much more individualized approach.

At regular intervals, employers should conduct thorough performance assessments of all employees, regardless of their position or length of service.⁴²⁹ The evaluations should be fair, transparent, and designed to correctly identify work deficiencies. 430 Among many other benefits, regular evaluations will enable welltrained reviewers to determine if any workers should be referred to medical experts for possible cognitive testing.⁴³¹

^{424.} See Gen. Dynamics Land Sys., Inc. v. Cline, 540 U.S. 581, 600 (2004).

^{425.} Workplace Education Program, supra note 411.

^{426.} Id.

^{427.} See supra Subparts IV.A, IV.B.

^{428.} See supra Subparts IV.C, IV.D.

^{429.} Mark Murphy, Here's Why You Still Need to Conduct Performance Reviews with Your Employees, Forbes (Nov. 4, 2018), https://www.forbes.com/ sites/markmurphy/2018/11/04/heres-why-you-still-need-to-conduct-performancereviews-with-your-employees/?sh=5d589c8d19f8.

^{430. 5.} I'm Conducting Performance Evaluations, U.S. Equal Emp. OPPORTUNITY COMM'N, https://www.eeoc.gov/employers/small-business/5-imconducting-performance-evaluations (last visited Feb. 15, 2022).

^{431.} See *supra* Subpart VI.B.1 for a discussion of employer training.

It is particularly important to document performance problems before requesting that employees consult a physician about testing.⁴³² If recorded performance failures suggest that an employee is experiencing cognitive deficits,⁴³³ the employer should discuss the specific examples of performance problems with the individual and instruct the worker to consult a doctor regarding testing.

Employers should not treat workers with performance problems arising from cognitive decline more harshly than workers who have long-term difficulty functioning for other reasons. Doing so may itself constitute discrimination under the ADA.⁴³⁴ Employers should communicate openly with employees and ensure that their response to performance shortcomings is lawful and proportionate to the problem.

If test results confirm the presence of a cognitive disability, the employer must engage in an interactive process with the employee to identify one or more reasonable accommodations, as discussed at length above. The employer need not provide the employee's first-choice accommodation if a less burdensome change would be effective. All parties should keep in mind that in some instances, the best solution might be a reduction in responsibilities, even if it is accompanied by a corresponding cut in salary.

In some cases, however, it is equally important for employers to be willing to terminate employees who cannot be accommodated. Some employers find it daunting or unpalatable to confront the problem and will do everything to avoid discharging low performers. But retaining incompetent employees is a risky business. People depend on their doctors, professors, attorneys, and other professionals for their health, education, and welfare. Employers must protect both the public and their employees from the consequences of allowing individuals to continue working when they simply cannot. Employers could ease the pain of a termination by helping those who are eligible for social security or disability insurance benefits pursue those resources. Assertion of the surface of the social security or disability insurance benefits pursue those resources.

^{432.} See Fleck, supra note 27; Suzanne Lucas, How to Handle an Employee in Mental Decline, INC. (Mar. 11, 2021), https://www.inc.com/suzanne-lucas/how-to-handle-an-employee-in-mental-decline.html.

^{433.} See supra note 55 and accompanying text (discussing signs of cognitive decline).

^{434. 42} U.S.C. § 12112(a).

^{435.} See supra Subparts III.B.4, IV.E.2.

^{436.} See supra notes 204–06 and accompanying text.

^{437.} See supra notes 359–63.

^{438.} Hyman, *supra* note 359 ("Most executives are slow to part ways with underperformers. Typically, they give the person an opportunity to turn things around. A second chance. A third chance. Anything to avoid the tough conversation.").

^{439.} See supra notes 403–07 and accompanying text.

C. The Role of Professional Associations

Professional associations should focus on cognitive decline among professionals and undertake initiatives to help workers and employers manage difficult situations. State bar associations have taken the lead in this area, instituting programs about "learning to spot cognitive decline" and "interventions to gracefully guide lawyers toward retirement."

Lawyer assistance programs help lawyers and judges who are facing mental health challenges, including cognitive deficits, and they receive many calls from concerned colleagues. The New Mexico Supreme Court Lawyer Succession and Transition Committee developed a video entitled "How to Identify and Respond to Issues of Cognitive Impairment" and a Succession Planning Handbook For New Mexico Lawyers. The New Mexico Judges and Lawyers Assistance Program has run seminars throughout the state using these materials. 445

Lawyer assistance program initiatives constitute a useful precedent for other professional organizations. The AMA, state medical societies, the American Association of University Professors, and many others would do well to offer their constituents similar programs and support mechanisms. Professional societies could also work with testing developers to better tailor tests to identify mental capacities and skills that are necessary for particular work competencies. 447

^{440.} See supra notes 116-19, 141 and accompanying text.

^{441.} Derocher, *supra* note 104.

^{442.} Id.; Directory of Lawyer Assistance Programs, Am. BAR ASS'N, https://www.americanbar.org/groups/lawyer_assistance/resources/lap_programs_by_state/ (last visited Jan. 4, 2022); Intervention and Impairment Assistance, Am. BAR ASS'N, https://www.americanbar.org/groups/professional_responsibility/resources/lawyersintransition/interventionandimpairmentassistance/ (last visited Jan. 4, 2022).

^{443.} Derocher, supra note 104; State Bar of New Mexico, How to Identify & Respond to Issues of Cognitive Impairment (2013), YouTube (Sept. 3, 2015), https://www.youtube.com/watch?v=s788vx4LWSw.

^{444.} Derocher, *supra* note 104. *See generally* N.M. SUP. CT. LAW. SUCCESSION & TRANSITION COMM., SUCCESSION PLANNING HANDBOOK FOR NEW MEXICO LAWYERS (2014), https://www.sbnm.org/Portals/NMBAR/forMembers/Succession/SuccessionHandbook.pdf.

^{445.} Derocher, *supra* note 104.

^{446.} About, AMA, https://www.ama-assn.org/about (last visited Feb. 15, 2022); About the AAUP, AM. ASS'N UNIV. PROFESSORS, https://www.aaup.org/about-aaup (last visited Feb. 15, 2022); Medical Societies and Associations, PHYSICIANS FOUND., https://physiciansfoundation.org/medical-societies-and-associations/ (last visited Feb. 15, 2022) (listing state medical societies).

^{447.} See supra notes 343–47 and accompanying text.

CONCLUSION

Cognitive decline is an extremely complicated and sensitive workplace challenge. There is no simple solution, and properly addressing it requires knowledge, interpersonal skills, and goodwill. Careful analysis of the ADEA, ADA, and disparate impact provision of Title VII yields strong guidance as to prohibited and permissible employer conduct. The statutes demand individualized assessment of employees rather than blanket policies regarding retirement or mandatory cognitive testing. Revising the ADA to prohibit discrimination based on predictions of future illness and to disallow preemployment testing that is not job-related would provide workers with further needed protections.

Identifying and responding to cognitive decline quickly can enable employees to obtain reasonable accommodations and continue to work productively. It can also help protect employers and workers from legal liability and promote the safety and welfare of the people they serve. Many stakeholders have a role to play in responding to concerns about employee cognitive deficits, including workers, employers, cognitive testing developers, the human resources community, and professional associations. Much work remains to be done to develop appropriate tools and training strategies for what is very likely to be a growing phenomenon in the American workplace.