Genetic Discrimination: Why Bragdon Does Not Ensure Protection

Laura F. Rothstein
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INTRODUCTION

Susan Brown is thirty-years-old, married, and has a family history of breast cancer. Because of this, Susan decides to be screened for \textit{BRCA1} and \textit{BRCA2} gene mutations.\(^1\) As a result of this screening she learns that she has a genetic predisposition to breast cancer. Susan then decides not to have children for two reasons. First, she is concerned that she would pass the genetic predisposition to breast cancer to her children. Secondly, she is concerned about whether her life expectancy is so affected by the potential breast cancer that she might not live through their childhood years.

Susan is employed at a large national bank as a senior loan officer. During the course of casual conversation with a coworker, Susan mentions her decision not to have children and the reasons for her decision. Several months later, she learns of an open position for a regional manager of commercial loans. The training for the position takes a year, and generally people in that position are in line for further promotions to higher level management positions.

Although Susan applies and is the most qualified applicant for the position by all criteria, she is passed over for someone with much less experience and lower job evaluation. She learns through the grapevine that the screening committee had discussed her predisposition to cancer and had decided against her promotion. The decision was due to concerns that she might become ill and need time off for treatments or, even worse, become unable to continue in the position.

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1. See generally Thomas D. Gelehrter et al., Principles of Medical Genetics 265 (2d ed. 1998) (describing \textit{BRCA1} and \textit{BRCA2} as breast cancer susceptibility genes which were found as a result of observations that a distinct dominant breast cancer susceptibility could be identified). These two genes account for 5-10\% of all breast cancers. See \textit{id}. Women who have inherited the \textit{BRCA1} or \textit{BRCA2} genes have a 60-90\% lifetime risk of developing breast cancer and a 20-60\% chance for ovarian cancer. See \textit{id}.
Some policymakers, advocates, and legal scholars believe that Susan would have a remedy for such discrimination under the Americans with Disabilities Act (ADA)\(^2\) because she has been discriminated against on the basis of disability.\(^3\) Some believe that the Supreme Court's decision in *Bragdon v. Abbott*\(^4\) establishes a broad definition of disability under the ADA;\(^5\) although others believe that a more general applicability of *Bragdon* is not appropriate.\(^6\)

As the following analysis will demonstrate, the belief that *Bragdon* resolves the issue of genetic discrimination is not well founded. Unfortunately, this belief may be the basis for deciding that additional statutory protections are not necessary to protect individuals from discrimination on the basis of their genetic profiles. Although unlikely, some lower courts may rely on *Bragdon* and other regulatory and statutory interpretations to extend ADA coverage to genetic discrimination. Such holdings are even less likely after the most recent Supreme Court decisions on whether mitigating measures should be taken into account in defining who is disabled under the ADA.\(^7\) As this analysis will demonstrate, it would be much better to provide additional statutory protection to ensure consistent application of the ADA to genetic discrimination.

I. THE STATUTORY PROVISIONS

The Americans with Disabilities Act (ADA) of 1990 and its model, the Rehabilitation Act of 1973,\(^8\) provide protection against discrimination on the basis of disability for a broad spectrum of society. The various sections of these statutes apply to almost all employers (public

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5. See generally Dichter & Sutor, supra note 3.
7. See *Sutton*, 119 S. Ct. 2139; *Murphy*, 119 S. Ct. 2133; *Albertsons*, 119 S. Ct. 2162; see also infra text accompanying notes 101-121.
and private),\textsuperscript{9} to a broad array of programs of public accommodation,\textsuperscript{10} and governmentally provided programs and services,\textsuperscript{11} including higher education and health care services.

The basic provisions of both statutes prohibit covered programs from discriminating against otherwise qualified individuals with disabilities on the basis of those disabilities and require reasonable accommodations for those protected by the statutes. The statutes have been the subject of an enormous body of case law, scholarly discussion, and media attention. Several issues have received much attention, including which programs are actually subject to the statutes, what is meant by reasonable accommodation, and when is someone otherwise qualified. The issue of who is disabled\textsuperscript{12} under the statute is relevant to the issue of genetic discrimination.

The statutes do not list categories of conditions protected against discrimination. Rather, Congress twice (in 1973 and in 1990) chose to define disability in a more generalized way. A person with a disability is someone who has “(A) a physical or mental impairment that substantially limits one or more major life activities; (B) a record of such an impairment; or (C) [is] regarded as having such an impairment.”\textsuperscript{13} The ADA further protects from discrimination individuals who associate with someone who is disabled under the statute.\textsuperscript{14} This

\textsuperscript{9} See 42 U.S.C. § 12112 (1994) (as of 1994, employers with 15 or more employees are subject to the ADA); 29 U.S.C. § 791 (covering federal government employees), § 793 (covering federal contractor employees), § 794 (covering employees of recipients of federal financial assistance).

\textsuperscript{10} See Title III of the ADA, 42 U.S.C. §§ 12181-12189 (1994) (covering 12 categories of private providers of public accommodations, including programs of education and health services); § 504 of the Rehabilitation Act, 29 U.S.C. § 794 (covering private programs receiving federal financial assistance).


\textsuperscript{12} See generally Laura F. Rothstein, Disabilities and the Law §§ 4.08, 4.09 (2d ed. 1997) (defining disability and applying the ADA to special situations).

\textsuperscript{13} 42 U.S.C. § 12102(2) (1994); see also id. § 12114 (excluding from the definition of "qualified individual with a disability individuals who engage in the illegal use of drugs when the covered entity takes action on the basis of the drug use); § 12208 (stating that the term disabled or disability does not apply to an individual solely because that individual is a transvestite); § 12211 (excluding homosexuality and bisexuality from being impairments or disabilities); § 504 of the Rehabilitation Act, 29 U.S.C. § 705(9) (1999) (defining disability as "a physical or mental impairment that constitutes or results in a substantial impediment to employment; or for the purposes of sections 701, 713, and 714 of this title and subchapters II, IV, V, and VII of this chapter . . . a physical or mental impairment that substantially limits one or more major life activities").

definition leaves several fact issues for debate, including whether a particular condition is an "impairment," what constitutes a "major life activity," and whether the individual is "substantially limited" in that major life activity.

II. THE REGULATIONS

The regulations, the related commentary, and analysis of the regulations, rather than the actual statute, flesh out more expansive definitions and some guidance on these issues. The regulations define physical or mental impairment as:

(1) Any physiological disorder, or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, respiratory, cardiovascular, reproductive, digestive, genito-urinary, hemic and lymphatic, skin, and endocrine; or

(2) Any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities.15

Major life activities are defined as "functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working."16

Lastly, substantially limits means:

(i) Unable to perform a major life activity that the average person in the general population can perform; or

(ii) Significantly restricted as to the condition, manner or duration under which an individual can perform a particular major life activity as compared to the condition, manner, or duration under which the average person in the general population can perform that same major life activity.17

In addition, the factors to be considered in determining whether someone is substantially limited in a major life activity are "(i) the nature and severity of the impairment; (ii) the duration or expected duration of the impairment; and (iii) the permanent or long term impact, or the expected permanent or long term impact of or resulting from the impairment."18

15. 29 C.F.R. § 1630.2(h) (i)-(ii) (1999).
16. Id. § 1630.2(i).
17. Id. § 1630.2(j)(1)(i)-(ii).
18. Id. § 1630.2(j)(2)(i)-(iii).
When the major life activity of working is at issue, the term substantially limits means:

significantly restricted in the ability to perform either a class of jobs or a broad range of jobs in various classes as compared to the average person having comparable training, skills, and abilities. The inability to perform a single, particular job does not constitute a substantial limitation in the major life activity of working.\(^\text{19}\)

The regulations also clarify that having “a record of an impairment” protects those with a history of, or having been misclassified as, having mental or physical impairments that substantially limit one or more major life activities.\(^\text{20}\)

Being regarded as having an impairment means:

1. [Having] a physical or mental impairment that does not substantially limit major life activities but is treated by a covered entity as constituting such limitation;
2. [Having] a physical or mental impairment that substantially limits major life activities only as a result of the attitudes of others towards such impairment; or
3. [Having] none of the impairments defined in paragraphs (h) (1) or (2) of this section, but is being treated by a covered entity as having a substantially limiting impairment.\(^\text{21}\)

III. EEOC Interpretations

The Equal Employment Opportunity Commission (EEOC) is the agency charged with enforcing the ADA for employment purposes.\(^\text{22}\) As part of its responsibility, it has issued substantial guidance on interpreting the requirements of the statute. The EEOC Interpretive Guidance indicates that “covered entities that discriminate against individuals on the basis of [predictive] genetic information are regarding the individuals as having impairments that substantially limit a major life activity. Those individuals, therefore, are covered by the third part of the definition of ‘disability.’”\(^\text{23}\)

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19. Id. § 1630.2(j)(3).
20. See id. § 1630.2(k).
21. Id.
22. See 42 U.S.C. § 12116 (1994). The EEOC has the authority to issue regulations to carry out the provisions of §§ 12111-12117. See id.
The problem with the EEOC interpretation is that while rules issued by the EEOC are entitled to judicial deference, as are all federal agency rules, the courts are not required to accept EEOC's guidance. Notably, the Supreme Court, in its opinion in *Sutton v. United Air Lines, Inc.*, raises questions about the deference to be paid to EEOC and Department of Justice guidance because no agency was charged with interpreting the definition of “disability” under the ADA. The Court further determines that the agency guidelines are an impermissible interpretation of the ADA. The discounting of agency interpretations in *Sutton* thus raises questions about what deference the Court would give to agency interpretations on the issue of genetic predisposition.

### IV. LEGISLATIVE HISTORY

There is little legislative history regarding whether genetic conditions are to be considered disabilities under the ADA. The legislative history that does exist seems to support the inclusion of coverage on grounds similar to the EEOC interpretations. The limited legislative history on the issue, however, has caused more than one commentator to question whether Congress really thought much about the issue at all.

### V. JUDICIAL INTERPRETATION

The key arbiters of who is protected under the ADA are the courts. Because the ADA is not explicit in its coverage, it ultimately falls to the courts to determine whether genetic discrimination fits within the definition of a disability. The courts have some latitude in applying regulatory and historical guidance on this issue. Although regulations are given deference because of the administrative requirements relating to their promulgation, even regulations are occasion-
ally struck down. While the ADA regulations seem unlikely to be ignored, the courts are ultimately left to resolve questions of statutory interpretation.

The courts have begun to address some cases that might provide guidance on the issue of genetic discrimination. The most significant of these decisions to date is Bragdon v. Abbott. Bragdon is important because it addresses an issue closely related to genetic discrimination.

The Bragdon Case

Bragdon v. Abbott involved a woman who was HIV-positive, but asymptomatic, who sought dental treatment. When the dentist, who had inquired about her HIV status, discovered that she had a cavity, he advised her that he would fill the cavity only at a hospital, which would require her to pay the cost of using the hospital facilities. Ms. Abbott claimed discrimination under Title III of the ADA, which applies to private providers of public accommodations and prohibits them from discriminating against otherwise qualified individuals with disabilities on the basis of their disabilities. There was no dispute about whether Title III applied to the dentist’s office. There was disagreement, however, about two other major issues. First, Dr. Bragdon claimed that Ms. Abbott was not disabled within the definition of the ADA. Second, he based his diagnosis and suggested procedure on his view that her condition posed a direct threat to him, a defense that has been recognized as justifying different conduct in certain instances.

The district court granted summary judgment to Ms. Abbott holding that HIV infection is a disability under the ADA even if it has not yet progressed to the symptomatic stage. The district court also held that Abbott’s treatment in Bragdon’s office was not a direct threat to the health and safety of others, and the First Circuit affirmed.

33. See id. at 2201.
35. See Bragdon, 118 S. Ct. at 2201.
36. See id. at 2210.
37. See id.
38. See id. at 2201.
39. See id.
40. See id.
As previously noted, the ADA protects individuals who have an impairment that substantially limits them in one or more major life activities, including those who have a record of such an impairment and those who are regarded as having such an impairment.\textsuperscript{41} Many courts had interpreted this to mean one of two things. The first being that individuals with HIV are substantially limited in the major life activity of reproduction or secondly, that because of the stigmatizing effect of being HIV-positive, they were regarded as having a disability.\textsuperscript{42}

It had been generally thought that the Supreme Court’s decision in \textit{School Board v. Arline},\textsuperscript{43} holding that a schoolteacher with tuberculosis was covered under the Rehabilitation Act,\textsuperscript{44} would control the \textit{Bragdon} case because the ADA is intended to be interpreted consistently with the Rehabilitation Act. Furthermore, the \textit{Bragdon} case presented the Court with the opportunity to decide that anyone who is HIV-positive is disabled under the ADA.

In a five-to-four decision, the Supreme Court vacated and remanded the decision of the First Circuit.\textsuperscript{45} According to the majority opinion of Justice Kennedy, Ms. Abbott’s HIV infection constituted a disability under the ADA because it is a physical impairment that substantially limits the major life activity of reproduction.\textsuperscript{46} Justice Kennedy also held that under the direct threat provision of the ADA, the risk of a significant health risk from treating or accommodating someone with HIV must be based on medical or objective evidence, not on one’s good-faith belief that a significant risk exists.\textsuperscript{47}

The Court left open a number of issues, but it clearly held that reproduction is a major life activity.\textsuperscript{48} This is significant due to the fact that neither the ADA nor the regulations list had previously included it in their respective non-exclusive lists.\textsuperscript{49} The Court then determined that Ms. Abbot had demonstrated that for her, HIV status was a substantial limitation in her decision not to procreate, due to con-

\textsuperscript{41} See \textit{supra} note 13 and accompanying text.
\textsuperscript{43} 480 U.S. 273 (1987).
\textsuperscript{44} See \textit{id.} at 289; see also §504 of the Rehabilitation Act, 29 U.S.C. § 794 (1999).
\textsuperscript{46} See \textit{id.} at 2213.
\textsuperscript{47} See \textit{id.} at 2210.
\textsuperscript{48} See \textit{id.} at 2204, 2206, 2209.
\textsuperscript{49} See \textit{id.} at 2203 (referring to regulations issued by the Department of Justice which adopt verbatim the Department of Health, Education, and Welfare definition of physical impairment).
cerns about risk to her partner in conception and risk to the child in childbirth.\textsuperscript{50} By focusing on the facts in this case, the Court did not say that every individual who is HIV-positive is covered.\textsuperscript{51} Although many had hoped that the Court would address whether the "regarded as" portion of the definition would apply, it did not. The direct threat issue also remains unresolved.\textsuperscript{52}

The case leaves unresolved a number of issues relating to genetic discrimination in the context of its relationship to reproduction as a major life activity. It has been asserted that \textit{Bragdon} establishes that reproduction is a major life activity and that because Sidney Abbott was substantially limited in that major life activity as a result of her HIV status, a similar analysis could be applied to genetic conditions. The argument would be that having a genetic predisposition to certain disorders could adversely affect an individual's decision to reproduce for fear of passing on the gene mutation to the individual's offspring. Thus, the \textit{Bragdon} Court's reasoning would protect individuals from discrimination on the basis of those genetic markers.

In \textit{Berk v. Bates Advertising USA, Inc.},\textsuperscript{53} a post-\textit{Bragdon} decision, the district court held that breast cancer substantially limited the major life activity of reproduction because it made pregnancy unduly risky and the cancer treatment included advice to have surgery that would destroy any chance of reproduction.\textsuperscript{54} This is significant because it is the first case in which any form of cancer was held to be a disability because it was a substantial limitation on the major life activity of reproduction.\textsuperscript{55} Nevertheless, this case involved an individual who was

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  \item \textsuperscript{50} See id. at 2206.
  \item \textsuperscript{51} See id. at 2206 ("In view of our holding, we need not address the second question presented, i.e. whether HIV is a per se disability under the ADA.").
  \item \textsuperscript{52} See id. at 2210, 2213.
  \item \textsuperscript{53} 25 F. Supp. 2d 265 (S.D.N.Y. 1998).
  \item \textsuperscript{54} See id. at 270.
  \item \textsuperscript{55} Cf. Graham v. Rosemount, Inc. 40 F. Supp. 2d 1093 (D. Minn. 1999) (holding that an employee claiming discrimination based on breast cancer was not qualified because of her inability to work in a setting requiring interaction with other employees). For pre-\textit{Bragdon} cases involving cancer as a disability, see Sanders v. Arneson Prods., Inc., 91 F.3d 1351 (9th Cir. 1996), \textit{cert. denied}, 520 U.S. 1116 (1997) (holding that a psychological impairment resulting from recovery from colon cancer surgery is not a covered disability); Gordon v. E.L. Hamm & Assoc., Inc. 100 F. 3d 907 (11th Cir. 1996), \textit{cert. denied}, 118 S. Ct. 630 (1997) (holding that the side effects of chemotherapy for lymphoma did not result in a covered disability); Ellison v. Software Spectrum, Inc., 85 F.3d 187 (5th Cir. 1996) (holding that a woman with breast cancer who had undergone a lumpectomy and radiation treatment was not disabled); Shea v. Village Green Care Ctr., Ltd., No. 5:97-CV-343-BR3, 1999 WL 960307 (E.D.N.C. Aug. 31, 1998) (holding that a record of cancer can be a record of a disability); Vendetta v. Bell Atlantic Corp., No. CIV. A. 97-4898, 1999 WL 575111 (E.D. Pa. Sept. 8, 1998) (holding that cancer may be a disability); Madjlessi v. Macy's West,
symptomatic, and it would be quite different to extend this to genetic predisposition to cancer.

In another post-Bragdon case, Cornman v. N.P. Dodge Management Co., the court held that although silicone leakage and attendant pain was not a disability, and the employee was not regarded as having an impairment that substantially limited a major life activity, there still existed a fact issue as to whether the employee’s mastectomy to treat breast cancer constituted a disability under the “record of” impairment prong. The court, in applying the Bragdon rationale, found that because “society clearly considers a woman’s breasts to be an integral part of her sexuality,” this would negatively affect a person’s sexual relations in a substantial way and would thus be considered a disability under the ADA.

A contrary view is found in Schwertsager v. Boynton Beach, which involved an employee who had breast cancer and reconstructive surgery. The court, in applying the Bragdon reasoning, found that although the reconstructive surgery did affect caring for herself, dressing, and cooking, and that these are major life activities, these impairments were temporary. The court went on to hold that the plaintiff had not demonstrated that she was regarded as having an impairment, nor did she show a record of being impaired.

In addition, two recent decisions from the Northern District of Texas may eliminate a plaintiff’s ability to argue that reproduction is a major life activity under Bragdon. Fabio Gutwaks, who brought suit following his dismissal from American Airlines, relied on the Bragdon Court’s holding that reproduction is a major life activity under the ADA. Gutwaks claimed that American Airlines discriminated against him because he was HIV-positive. The district court, citing Sutton, explained that whether an individual is disabled under the ADA should be determined by evaluating the “extent that the physical impairment substantially limits the individual claimant’s major life activi-

Inc., 993 F. Supp. 736 (N.D. Cal. 1997) (holding that breast cancer or a history of breast cancer is not a disability).

56. 43 F. Supp. 2d 1066 (D. Minn. 1999).
57. See id. at 1070.
58. See id. at 1070-71.
59. See id. at 1071-72.
60. Id. at 1072.
62. See id. at 1359-60.
63. See id. at 1360-61.
65. See id. at *4, *10.
ties. Gutwaks claimed he was limited in the major life activity of reproduction; however, unlike the plaintiff in Bragdon, Gutwaks admitted that he did not have, and never had, any desire to have children. Relying on Qualls v. Lack's Stores Inc. and noting that Gutwak's decision not to have children was not linked to his HIV status, the magistrate found that reproduction was not a major life activity for Gutwaks. Because Gutwaks could not point to another substantial limitation, he was not disabled under the ADA. Although the Qualls court did not cite Bragdon or Sutton, its grant of defendant's motion for summary judgment is consistent with both decisions, since the plaintiff failed to offer any evidence that could show his Hepatitis C made him disabled under the ADA. Like Gutwaks, Qualls claimed that he was substantially limited in the major life activity of reproduction, however he had undergone a vasectomy after he and his wife decided they did not want any more children. Because the court could not conclude that his inability to reproduce was linked to his Hepatitis C, the court could not find that he was disabled under the ADA.

As Gutwaks and Qualls illustrate, only a simplistic reading of Bragdon would permit the conclusion that the case provides support for ADA coverage of individuals alleging genetic discrimination. The post-Bragdon cases involving breast cancer illustrate the confusion and lack of clarity the courts have in applying the Bragdon rationale to genetic conditions. Even if Bragdon could be found to apply to some decisions not to reproduce because of genetic conditions, it is unlikely that it would apply to all possible situations.

In assessing whether Bragdon established that a genetic predisposition is a disability under the ADA, the starting point is whether the condition to which the individual is predisposed is a physical impairment. In Bragdon, the Court noted the following in determining whether HIV infection is an impairment:

In issuing these regulations, HEW decided against including a list of disorders constituting physical or mental im-

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66. Id. at *13 (emphasis added); see infra text and notes accompanying section VII for a discussion of the Sutton decision and its implications.
67. See id. at *14-15.
69. See Gutwaks, 1999 U.S. Dist. LEXIS 16833, at *14-16.
70. See Qualls, WL 731758, at * 2-3.
71. See id.
pairments, out of concern that any specific enumeration might not be comprehensive. The commentary accompanying the regulations, however, contains a representative list of disorders and conditions constituting physical impairments, including "such diseases and conditions as orthopedic, visual, speech, and hearing impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, heart disease, diabetes, mental retardation, emotional illness, and . . . drug addiction and alcoholism."

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HIV infection is not included in the list of specific disorders constituting physical impairments, in part because HIV was not identified as the cause of AIDS until 1983. HIV infection does fall well within the general definition set forth by the regulations, however.

The disease follows a predictable and, as of today, an unalterable course. Once a person is infected with HIV, the virus invades different cells in the blood and in body tissues. [The stages of infection are detailed].

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In light of the immediacy with which the virus begins to damage the infected person's white blood cells and the severity of the disease, we hold it is an impairment from the moment of infection. As noted earlier, infection with HIV causes immediate abnormalities in a person's blood, and the infected person's white cell count continues to drop throughout the course of the disease, even when the attack is concentrated in the lymph nodes. In light of these facts, HIV infection must be regarded as a physiological disorder with a constant and detrimental effect on the infected person's hemic and lymphatic systems from the moment of infection. HIV infection satisfies the statutory and regulatory definition of a physical impairment during every stage of the disease. 74

With regard to genetic disorders, the easiest way to consider the coverage of the ADA in light of Bragdon is to divide them into expressed and unexpressed disorders. 75 For expressed disorders, the issue is merely whether the impairment constitutes a substantial limitation of one or more major life activities. To illustrate, an individual with symptomatic Huntington's Disease would have substantial limitations on the major life activities of walking, thinking, and work-

74. Id. at 2202-04 (citations omitted).
75. See Michael R. Cummings, Human Heredity 102-03 (1994).
ing, among others. On the other hand, an individual with mild pigment-type albinism would be limited only in certain types of outdoor employment.

For unexpressed genetic disorders, a narrow reading of *Bragdon* might suggest that under the ADA, the individual does not have an "impairment," regardless of penetrance, severity, or other predictive risk factors. So, for example, a woman's *BRCA1* mutation would not be an impairment because she is not yet affected.

The preceding discussion, of course, applies only to individuals who are presymptomatic or at increased risk of adult onset genetic disorders. Individuals who are unaffected carriers of recessive disorders (for example, cystic fibrosis) or X-linked disorders (for example, Duchenne muscular dystrophy) would not be covered under even the most expansive reading of *Bragdon*. However, these individuals might be subject to discrimination in employment situations because employers are concerned about potential health care costs of the offspring of these employees.

Assuming that a court would determine, however, that an individual who is genetically predisposed to a disorder should be treated like someone who is asymptomatic for HIV, this is only the first step of the inquiry. As the *Bragdon* Court notes:

> The statute is not operative, and the definition not satisfied, unless the impairment affects a major life activity. Respondent's claim throughout this case has been that the HIV infection placed a substantial limitation on her ability to

76. See id. at 103.
77. See id. at 102.
78. The majority opinion in *Bragdon* was based to a large degree on the fact that even an individual who was asymptomatic still had the pre-clinical effects of HIV from the moment of infection. There is a risk in using this type of analysis to distinguish asymptomatic HIV infection from asymptomatic genetic predisposition. New developments in molecular biology undoubtedly will indicate molecular changes in proteins and other biomarkers that are precursors of phenotypic expression.
79. In the future, however, when technologies such as genetic biomarkers are refined, and it is possible to measure the preclinical affects of gene mutations, then these effects would arguably be impairments.
80. This class of potential plaintiffs would include individuals of working age who were not symptomatic but who were at risk of developing symptoms of a genetic disorder later in life.
81. See Gelehrter et al., supra note 1, at 23. Recessive traits are defined as those conditions that are clinically manifest only in individuals homozygous for the mutant gene (i.e., carrying a double dose of the abnormal gene). See id.
82. See id. X-linked disease is defined as a disease that is encoded by a mutant gene on the X chromosome. See id.
83. See Rothstein, supra note 28, at 26-30.
reproduce and to bear children. Given the pervasive, and invariably fatal course of the disease, its effect on major life activities of many sorts might have been relevant to our inquiry. Respondent and a number of amici make arguments about HIV's profound impact on almost every phase of the infected person's life. In light of these submissions, it may seem legalistic to circumscribe our discussion to the activity of reproduction. We have little doubt that had different parties brought suit they would have maintained that an HIV infection imposes substantial limitations on other major life activities.84

This is where the Court hints that other major life activities are probably affected by HIV seropositivity,85 an analysis that if it had been further developed might be useful in the context of genetic conditions:

We ask, then, whether reproduction is a major life activity. We have little difficulty concluding that it is. As the Court of Appeals held, “[t]he plain meaning of the word ‘major’ denotes comparative importance” and “suggest[s] that the touchstone for determining an activity’s inclusion under the statutory rubric is its significance.” Reproduction falls well within the phrase “major life activity.” Reproduction and the sexual dynamics surrounding it are central to the life process itself.86

And perhaps the most important step in applying the Bragdon analysis to genetic conditions is the last element the Court addresses in whether HIV infection is covered:

The final element of the disability definition in subsection (A) is whether respondent’s physical impairment was a substantial limit on the major life activity she asserts . . . .

Our evaluation of the medical evidence leads us to conclude that respondent’s infection substantially limited her ability to reproduce in two independent ways. First, a woman infected with HIV who tries to conceive a child imposes on the man a significant risk of becoming infected. The cumulative results of 13 studies collected in a 1994 textbook on AIDS indicates that 20% of male partners of women with

85. See id. at 2205. Seropositivity is defined as having a positive result to an exam that measures serum antibody titers of infectious diseases. See Encyclopaedia and Dictionary of Medicine, Nursing and Allied Health 1355 (5th ed. 1992).
86. Bragdon, 118 S. Ct. at 2205 (citations omitted).
HIV became HIV-positive themselves, with a majority of the studies finding a statistically significant risk of infection.

Second, an infected woman risks infecting her child during gestation and childbirth, i.e., perinatal transmission. Petitioner concedes that women infected with HIV face about a 25% risk of transmitting the virus to their children. Published reports available in 1994 confirm the accuracy of this statistic.

Petitioner points to evidence in the record suggesting that antiretroviral therapy can lower the risk of perinatal transmission to about 8%. The Solicitor General questions the relevance of the 8% figure, pointing to regulatory language requiring the substantiality of a limitation to be assessed without regard to available mitigating measures. We need not resolve this dispute in order to decide this case, however. It cannot be said as matter of law that an 8% risk of transmitting a dreaded and fatal disease to one's child does not represent a substantial limitation on reproduction.

The Act addresses substantial limitations on major life activities, not utter inabilities. Conception and childbirth are not impossible for an HIV victim but, without doubt, are dangerous to the public health. This meets the definition of a substantial limitation. The decision to reproduce carries economic and legal consequences as well. There are added costs for antiretroviral therapy, supplemental insurance, and long-term health care for the child who must be examined and, tragic to think, treated for the infection. The laws of some States, moreover, forbid persons infected with HIV from having sex with others, regardless of consent.

In the end, the disability definition does not turn on personal choice. When significant limitations result from the impairment, the definition is met even if the difficulties are not insurmountable. For the statistical and other reasons we have cited, of course, the limitations on reproduction may be insurmountable here. Testimony from the respondent that her HIV infection controlled her decision not to have a child is unchallenged. In the context of reviewing summary judgment, we must take it to be true.87

Taking this reasoning and applying it to genetic conditions illustrates why Bragdon provides little assurance that the ADA adequately protects individuals with genetic predispositions against discrimination. First, it is clear that partners of individuals with genetic condi-

87. Id. at 2205-07 (citations omitted).
tions will not be physiologically affected. Second, depending on the genetic condition, there is a risk of transmission (i.e., vertical transmission in the case of genetics) to the child. The likelihood of the risk, of course, varies from one genetic condition to another. For example, it would depend on whether the mode of inheritance was dominant, recessive, or X-linked.88

Like HIV infection, while conception and childbirth are not impossible for individuals with genetic conditions, they can affect the public health and carry with them economic costs and legal consequences. Children who develop cystic fibrosis, for example, face lowered life expectancies and expensive long-term chronic health care needs. This, at least, would seem to support an application of the Bragdon analysis to genetic conditions.

The degree of risk remains unresolved. While the Court indicates that even an eight percent risk of transmittability is significant,89 it is not clear how this would apply in the case of genetic conditions. For genetic disorders with a high penetrance, such as Huntington’s disease,90 an individual with an excess number of CAG repeats would be nearly one hundred percent likely to become symptomatic.91 But what about conditions with a lower degree of penetrance or variable expressivity? For example, how would the substantiality of risk be determined in cases where the likelihood of the condition being expressed is variable, the age of onset varies, and/or the degree of penetrance is varied and unpredictable? Add to this the question of whether the condition is necessarily substantially limiting even if it is expressed. For example, neurofibromatosis can range from mild café au lait spots to serious growth abnormalities and deformities.92

In addition, due to the fact that Bragdon does not allow for individual choice to determine the level of risk but only some level of statistical likelihood, what is to happen in instances where the degree of risk is small, but the severity of the condition is very high?

88. A dominant mode of inheritance consists of those conditions that are expressed in individuals with one copy of a mutant allele and one copy of a normal allele. See GELEHRTER ET AL., supra note 1, at 23. For a definition of recessive traits see supra note 81, and for X-linked see supra note 82.

89. See Bragdon, 118 S. Ct. at 2206. The Court states, “[i]t cannot be said as a matter of law that an eight percent risk of transmitting a dread and fatal disease to one’s child does not represent a substantial limitation on reproduction.” Id.

90. See GELEHRTER ET AL., supra note 1, at 217.

91. See id., supra note 1, at 219.

92. See Annas, supra note 6, at 1257. The Annas article raises the question of whether, in the case of carriers of recessive genes, it is “only the couple as a couple that is disabled (in which case the ADA does not offer protection), or is each member of the couple disabled?” Id.
Finally, there is an inherent limitation on using reproduction as the major life activity in all cases of claimed genetic discrimination. Future courts will probably be faced with questions of whether only individuals of "normal" reproductive age are covered. Is the forty-five-year-old woman who chose to defer child bearing entitled to claim a substantial impairment? What about the eighty-year-old man who wants to father children? This further illustrates the obvious limitation that this does not protect the individuals because of what the genetic condition might mean for them, only for what it might mean for their future offspring. In the example given at the beginning of this paper, what if Susan Brown were fifty-five and already had her children and had a hysterectomy? She would not be affected in her major life activity of reproduction.

VI. THE "REGARDED AS" PRONG

If Bragdon does not provide the needed guidance, then what is the likelihood that the ADA will be interpreted under any other analysis to provide the desired protection? Some advocates and scholars of disability rights believe that the Bragdon case could have been decided on the "regarded as" prong, i.e., that individuals with HIV infection are viewed as being substantially limited in one or more major life activities because they are regarded as physically or mentally impaired.93 The Court, however, declined to provide any guidance and stated that because the issue had not been the basis for the lower court's decision, the issue was not properly before the Court.

One recent analysis by Dichter and Sutor of the application of the "regarded as" prong to genetic conditions provides support for an interpretation that those with HIV are regarded as substantially limited in one or more major life activities. They noted that although both the EEOC Interpretive Guidance and even some legislative history would support the position for coverage,94 there are several areas of concern with this basis for coverage. These concerns include the fact that a broad interpretation might add potentially millions of Americans to those covered.95 While this is a valid concern, another of the points they raise is less compelling. Dichter and Sutor question whether the ADA is needed to "protect individuals whose employers take their future health, productivity and insurance costs into ac-

93. See Dichter & Sutor, supra note 3, at 622-23.
94. See id. at 620, 625-26.
95. See id. at 626. This was one of the significant reasons the Supreme Court decided to limit the definition of disability in Sutton. See Sutton v. United Air Lines, Inc., 119 S. Ct. 2139, 2147 (1999).
count" when there is already adequate protection under other statutes, such as the Health Insurance Portability and Accountability Act (HIPAA) (which protects employees from discrimination in insurance based on genetic information) and the Employee Retirement Income Security Act (ERISA) (which protects against discrimination or interference with employee benefits).96

While HIPAA and ERISA ensure legal protection on their face, it can be difficult to prove violations of these statutes. Employers, who are concerned about the potential application of HIPAA and ERISA preventing them from discharging employees or reducing their benefits after diagnosis of an illness, may be reluctant to hire employees with genetic predispositions in the first place.

The dissent in Bragdon, written by Chief Justice Rehnquist, took the position that while asymptomatic HIV-positive status is a physical impairment, it is questionable whether reproduction is a major life activity.97 Even if reproduction is a major life activity, Justice Rehnquist would hold that HIV infection does not substantially limit that activity.98

VII. Implications of Bragdon

Bragdon does not clearly ensure that genetic discrimination is included within the analysis applying to HIV-positive status. The five-to-four opinion, when combined with the language in the dissent, indicates that the Supreme Court has already gone about as far as it is prepared to go on this issue. While there is some potential that a future case will focus more clearly on the "regarded as" prong, it would be a mistake to rely on Bragdon to provide assurance that the Supreme Court would extend ADA protection to genetic conditions.

As Wendy Parmet has noted, this Court does not tend to rely on public health policy as the basis for its holdings.99 Parmet analyzes the compelling public health policy reasons why HIV-positive individuals should always be protected against discrimination, reaching the result that providing such protection encourages individuals to be tested and to seek treatment without substantial fear of being treated adversely by society in the workplace and elsewhere.100 There is a similar

98. See id. at 2215-16.
99. See Parmet, supra note 6, at 237 (claiming that there is a divergence between the public health and legal perspectives).
100. See id. at 226.
compelling justification for ensuring that individuals are protected from genetic discrimination. It is in the public interest to have individuals tested for conditions such as colon cancer or breast cancer where those identified as genetically predisposed to these diseases can undergo more frequent colonoscopies, more frequent mammograms, or other prophylactic interventions. If individuals who are tested for various genetic conditions fear that they can be adversely affected in employment, in obtaining health or life insurance, or in other ways, they are far less likely to want to be tested. This is not in the best interests of these individuals, their family members, or society.

Sutton, Murphy, and Albertsons

As the preceding discussion indicates, the Supreme Court had already cast doubt on how broadly courts should read the definition of “individual with a disability” under the ADA before it decided significant ADA cases at the end of the 1998-99 term. In the cases of Sutton v. United Air Lines, Inc.,101 Murphy v. United Parcel Service, Inc.,102 and Albertsons Inc. v. Kirkingburg,103 the Court addressed the issue of whether medication or corrective devices that can mitigate an individual’s impairment should be considered in determining whether an individual’s physical or mental impairment substantially impairs a major life activity. The Court also provided some direction on the “regarded as” prong of the definition.

The three cases involved individuals whose medical conditions were correctable. In Sutton, the complainants were twin sisters with uncorrected visual acuity of 20/200, but whose vision was correctable to a functional level of individuals without the impairment.104 They claimed that United Air Lines’ refusal to hire them as airline pilots, based on their vision, violated the ADA.105 Murphy involved an individual with high blood pressure who was denied the opportunity to drive commercial vehicles.106 When Murphy took medication, his hypertension allowed him to function normally.107 The complainant in Albertsons also sought a position as a driver, in this case a truck driver for a grocery chain.108 Kirkingburg had monocular vision, and his failure to meet Department of Transportation basic vision standards

103. 119 S. Ct. 2162 (1999).
104. See Sutton, 119 S. Ct. at 2141.
105. See id.
106. See Murphy, 119 S. Ct. at 2136.
107. See id. at 2135.
108. See Albertsons, 119 S. Ct. at 2165.
for commercial truck drivers was the basis for the adverse employment decision.\textsuperscript{109}

In \textit{Sutton}, the Court held that "a person whose physical or mental impairment is corrected by medication or other measures does not have an impairment that presently 'substantially limits' a major life activity."\textsuperscript{110} The Court emphasized, however, that disabilities must be evaluated on an individual basis.\textsuperscript{111} The Court referred to diabetes as an example of a condition that varies widely.\textsuperscript{112} The Court further rejected a position that would make a diabetic per se disabled within the statute.\textsuperscript{113} It also rejected an approach that would require that simply because there are mitigating measures available to alleviate a particular condition, a person with that condition is not disabled.\textsuperscript{114} Because negative side effects of these measures might be severe, the individual may be justified in not taking advantage of them.\textsuperscript{115}

A significant basis for the Court's decision that not all health conditions should be considered as disabilities was the legislative history, which estimated forty-three million as the approximate population of individuals who have one or more physical or mental disabilities.\textsuperscript{116} This number is significantly less than the 160 million Americans who would be included under an approach that looks at "all conditions that impair the health or normal functional abilities of an individual . . . ."\textsuperscript{117}

The Court also addressed whether the plaintiffs with visual impairments fit within the "regarded as" prong of the definition.\textsuperscript{118} The Court stated there are two ways that one falls within this prong of the analysis: (1) when a covered entity mistakenly believes a person has a physical impairment that substantially limits one or more major life activities, or (2) when the entity mistakenly believes that an actual, non-limiting impairment substantially limits one or more major life activities.\textsuperscript{119} In both situations, the entity must have misperceptions about the individual that often "resul[t] from stereotypic assumptions

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111. \textit{See id.} at 2147 (citing \textit{Bragdon v. Abbott}, 118 S. Ct. 1296 (1998)).
112. \textit{See id.}
113. \textit{See id.}
114. \textit{See id.} The Court states, "a person whose physical or mental impairment is corrected by mitigating measures still has an impairment . . . ." \textit{Id.}
115. \textit{See id.} at 2147.
116. \textit{See id.}
117. \textit{Id.} at 2148.
118. \textit{See id.} at 2149-50.
119. \textit{See id.}
\end{flushleft}
not truly indicative of . . . individual ability." In *Sutton*, the Court held that the plaintiffs had failed to adequately allege that poor eyesight is regarded as an impairment that substantially limits them in the major life activity of working in a broad range of airline pilot positions for which they are qualified.

Applying this reasoning to *Bragdon*’s analysis of genetic predispositions raises additional questions about whether genetic conditions would be considered disabilities or at least whether genetic conditions should be defined as disabilities in all situations. First, it seems obvious that there will be a difference with respect to individuals depending on whether they have genetic markers that affect them individually or whether they will affect only offspring. In addition, there will probably be a difference whether the individual is currently impaired or only predisposed to the condition. In addition, it would then seem to matter whether the condition is one that is itself substantially limiting or one that may be regarded as substantially limiting. Based on *Sutton*, *Murphy*, and *Albertsons*, combined with *Bragdon*, any attempt to assert that a particular genetic predisposition is per se a disability entitled to statutory protection as interpreted by the Supreme Court is highly questionable.

Assuming that there are some conditions that the courts would agree are substantially limiting, there is the additional question as to whether mitigating measures, such as birth control measures, gene therapy, genetic counseling, fetal therapy, or voluntary termination of pregnancy, should be taken into account in cases involving substantially limiting genetic conditions. These questions will require an assessment of whether such “mitigating measures” are even available or affordable, what the risks are, and, of course, whether public policy bars their consideration.

**CONCLUSION**

Based on the foregoing discussion, it is far from clear that protection against discrimination on the basis of genetic predisposition is required by the ADA through its judicial and regulatory interpretations. *Bragdon* simply does not decide this issue and more recent Supreme Court decisions cast even greater doubt on the likelihood of a broad coverage for genetic predispositions. The complexity of genetic discrimination makes it particularly difficult to try to fit it within the statutory, regulatory, and judicial guidance to date.

120. *Id.* at 2150.
121. *See id.*
The need for protection against discrimination based on genotype seems obvious, although the ADA as currently written and interpreted does not provide clear guidelines on genetic discrimination. It is also not entirely clear whether the statute itself must be amended, new legislation enacted, or binding regulatory guidance through additional definitions and clarification issued to address genetic issues. It would seem, however, based on the foregoing discussion, that there is some doubt about how far the courts will go under the current interpretation of the definition. For these reasons, policymakers would do well to focus on the best way to address this complex issue rather than wait for the courts to act.