

# Access to Subspecialty Care for Patients With Mobility Impairment

## A Survey

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**Background:** Adults who use wheelchairs have difficulty accessing physicians and receive less preventive care than their able-bodied counterparts.

**Objective:** To learn about the accessibility of medical and surgical subspecialist practices for patients with mobility impairment.

**Design:** A telephone survey was used to try to make an appointment for a fictional patient who was obese and hemiparetic, used a wheelchair, and could not self-transfer from chair to examination table.

**Setting:** 256 endocrinology, gynecology, orthopedic surgery, rheumatology, urology, ophthalmology, otolaryngology, and psychiatry practices in 4 U.S. cities.

**Patients:** None.

**Measurements:** Accessibility of the practice, reasons for lack of accessibility, and planned method of transfer of the patient to an examination table.

**Results:** Of 256 practices, 56 (22%) reported that they could not accommodate the patient, 9 (4%) reported that the building was inaccessible, 47 (18%) reported inability to transfer a patient from a wheelchair to an examination table, and 22 (9%) reported use of height-adjustable tables or a lift for transfer. Gynecology was the subspecialty with the highest rate of inaccessible practices (44%).

**Limitation:** Small numbers of practices in 8 subspecialties in 4 cities and use of a fictional patient with obesity and hemiparesis limit generalizability.

**Conclusion:** Many subspecialists could not accommodate a patient with mobility impairment because they could not transfer the patient to an examination table. Better awareness among providers about the requirements of the Americans with Disabilities Act and the standards of care for patients in wheelchairs is needed.

**Primary Funding Source:** None.

*Ann Intern Med.* 2013;158:441-446.

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More than 3 million U.S. adults require a wheelchair for mobility (1). The Americans with Disabilities Act of 1990 states that all medical practitioners must provide “full and equal access to their health care services and facilities.” This statement indicates that if a patient with mobility impairment seeks care, the physician must furnish accommodations to administer care that is equal, in quality and quantity, to that provided to patients without impairment (2). The literature that the U.S. Department of Justice and the Department of Health and Human Services provides to physicians suggests using specialty equipment, such as height-adjustable examination tables and mechanical lifts, to ensure that the transfer process is safe for the patient and staff (3), and a new federal rule proposes to define the technical specifications for such equipment (4).

Despite this mandate, patients with mobility impairment are frequently denied services, receive less preventive care and fewer examinations, and report longer waits to see subspecialists (5–17). However, to our knowledge, no study has attempted to quantify or characterize the lack of access to subspecialists that patients with mobility impairment face. We aimed to describe the access to medical and surgical subspecialists for U.S. patients with substantial mobility impairment and to characterize the barriers that these patients experience when trying to schedule appointments with subspecialists.

## METHODS

### Study Design

We modeled our design on a recent audit study that used a deceptive technique with no up-front explanation or informed consent at the time of data collection (18). We chose this technique because we wanted to document and characterize access barriers for patients with mobility impairment in a setting as close to real life as possible (19).

### Selection of Practices

We obtained publicly available lists of physicians from the Boards of Registration in Medicine in 4 states from geographically diverse U.S. regions: Georgia, Oregon, Texas, and Massachusetts. From these lists, we randomly selected subspecialists in 5 major metropolitan areas: Atlanta, Georgia, which was a pilot for the script; Dallas and Houston, Texas; Portland, Oregon; and Boston, Massachusetts. We chose large cities with a sufficient number of

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**Context**

The Americans with Disabilities Act of 1990 requires medical practitioners to provide equal access to health care for persons with disabilities.

**Contribution**

Investigators called 256 subspecialty practices in 4 cities and tried to make an appointment for a fictional patient who was obese and hemiparetic, used a wheelchair, and could not self-transfer to an examination table. Fifty-six practices said that they could not accommodate the patient because of building inaccessibility ( $n = 9$ ) or inability to transfer to an examination table ( $n = 47$ ). Twenty-two reported height-adjustable examination tables or lifts for transfer. Many practices reported the use of potentially unsafe methods of transfer from the wheelchair to the examination table.

**Caution**

Use of a fictional obese, hemiparetic patient limits generalizability.

**Implication**

Patients with mobility limitations may have difficulty accessing subspecialist care.

—The Editors

subspecialists to identify a random sample with no risk that the physicians could be identified. We chose 2 groups of subspecialties: those that we thought required transfer from a wheelchair to an examination table for adequate patient care (endocrinology, gynecology, orthopedic surgery, rheumatology, and urology) and those that may have equipment that could adjust to a sitting patient or that might not require transfer from a wheelchair to an examination table to evaluate the patient's symptom (otolaryngology, ophthalmology, and psychiatry).

Although we selected physicians by name, the practice was the unit of analysis. To avoid sampling a single practice more than once, we kept only the first randomly sampled physician in a practice and excluded all subsequent physicians in the same practice. We eliminated physicians who practiced solely in a hospital setting. We also excluded practices that were permanently closed, those in which the physician was retired or deceased, and those that did not treat the symptom that we described (for example, orthopedic hand surgeons who did not treat patients with hip pain). We sampled practices until we had contacted 8 eligible practices in each subspecialty in each city.

**Data Collection**

Four investigators were trained using a standardized script (**Supplement**, available at [www.annals.org](http://www.annals.org)). Two other investigators evaluated callers for accuracy and consistency. Using the script, the callers described themselves as medical students or resident physicians trying to make

an appointment for a fictional patient in a wheelchair. Because of deficits from a stroke, the patient was not weight-bearing and could not self-transfer. The patient also could not bring a family member to assist with transfer. To simulate a typical patient in our practice, we assigned the patient a weight of 99 kg.

The script, which included a chief symptom and brief medical history, varied depending on the subspecialty (**Table 1**). Clinical scenarios were chosen by a group of internists who used an iterative process to identify common medical conditions seen by each subspecialty. The scripts and standardized responses were pilot-tested in the Atlanta practices and revised as needed.

If a practice reported that it could make an appointment for the patient, the investigator would clarify that both the building and office were accessible and determine how the practice planned to transfer the patient from the wheelchair to the examination table. If the practice could not accommodate the patient, the investigator responded with the question, "Can you please explain why you are unable to accommodate this patient?"

In general, once these secondary questions were asked, the receptionist would connect the caller with an office manager or nurse. If the receptionist seemed unsure of the answers, the caller would ask to speak to an office manager or nurse. Callers deferred questions about insurance status and did not actually schedule an appointment.

The primary outcome measure was the percentage of practices that reported that they could accommodate the patient. Secondary outcomes were the method of transfer, the presence or absence of accessible equipment (for example, height-adjustable examination tables or mechanical lifts vs. standard tables and manual transfer), or why the patient could not be accommodated.

**Statistical Analysis**

We assessed the frequency of "yes, can accommodate" and "no, cannot accommodate" responses in total and stratified them by subspecialty and city. We constructed summary statistics overall and for each subspecialty and city by using frequencies and proportions. All analyses were conducted with the use of SAS software, version 9.2 (SAS Institute, Cary, North Carolina).

We evaluated qualitative responses by using pilot data (from Atlanta) to develop an a priori codebook. At least 3 investigators independently coded responses. We then met to discuss discrepancies in coding, resolve differences, and update the codebook in an iterative process. Using the final, comprehensive codebook, 3 investigators coded all 256 responses.

**Study Oversight and Postcollection Follow-up**

The Institutional Review Board at Baystate Medical Center, Springfield, Massachusetts, approved the study with a waiver of informed consent. This approval required that we send a debriefing letter to the offices at the end of data collection. This letter explained that the goal of the

**Table 1. Subspecialties and Simulated Patient Conditions Included in the Study**

Subspecialty	Chief Symptom	Condition Elaboration
Endocrinology	Poorly controlled diabetes	Using insulin 3 times daily and long-acting insulin at night; having occasional episodes of hypoglycemia, but hemoglobin A <sub>1c</sub> level is still 9.5%
Gynecology	Dysfunctional uterine bleeding	Postmenopausal woman with 4 mo of uterine bleeding; urine pregnancy test result is negative; anemia; pelvic ultrasonography pending
Orthopedic surgery	Hip pain	Left-sided pain (not stroke side) for >1 mo; radiograph is normal; no elevated leukocyte count; further imaging pending
Rheumatology	Hip pain	Left-sided pain (not stroke side) for >1 mo; radiograph is normal; no elevated leukocyte count; further imaging pending
Urology	Hematuria	Painless microscopic hematuria for the past 3 mo; normal urinalysis and urine culture; normal renal ultrasonogram (no mass or stone); normal renal function
Ophthalmology	Cataracts	History of cataracts with increased blurry vision for the past year
Otolaryngology	Hoarseness	Chronic hoarseness for 6 wk; failed conservative measures (course of antibiotics and omeprazole); 30 pack-year smoking history
Psychiatry	Depression	Depressed affect; sleep and attention problems; anhedonia; tried antidepressant for 2 mo but still having symptoms; stroke was >1 y ago

study was to describe deficiencies in the system of care for patients with mobility impairment and, as such, that the identity of physicians and practices would not be revealed. It also explained that the study was conducted without external funding. Finally, it provided contact information for the Baystate Medical Center Institutional Review Board and the principal investigator. The letter did not contain the results from that specific practice or overall study results but did offer to send the practice a copy of the published manuscript on request.

#### Role of the Funding Source

This study had no external funding.

## RESULTS

### Study Sample

We constructed lists of randomly selected practices in each subspecialty. Of 575 initially identified physicians, 3 practiced exclusively in a hospital setting and 111 could not be reached by telephone (for example, no answer or multiple unreturned voicemails). Of sampled practices, 26 were permanently closed, 34 reported that the symptom of the described patient was outside their scope of practice, 1 required more medical documentation than we could pro-

vide (insurance), 1 declined to answer, 138 were duplicates, and 5 were no longer accepting new patients. Our final sample consisted of 256 practices in 8 subspecialties across 4 sampled cities.

### Practice Accessibility

Of the 256 practices, 56 (22%) reported that they could not accommodate a patient in a wheelchair who could not self-transfer (Table 2). Nine of the 56 reported that the building was inaccessible. The remaining 47 practices reported that they could not transfer a patient from a wheelchair to an examination table. Reasons for the inability to transfer the patient included lack of staff who could perform the transfer (37 practices), a concern about liability (5 practices), or that the “patient was too heavy” (5 practices).

Among the 160 practices in the group that “require transfer for adequate care,” 42 (26%) reported that they could not accommodate the patient. Of these, 4 (2%) reported that the building was inaccessible and 38 (24%) reported that they could not transfer the patient. An additional 8 practices (5%) reported that they could see the patient but had no plans to transfer her out of her wheelchair for an examination, and 88 practices (55%) reported

**Table 2. Subspecialty Care Access for Patients With Mobility Impairment**

Variable	Total, n (%)	Transfer May Be Required, n (%)					Transfer May Not Be Required, n (%)		
		Endocrinology	Gynecology	Orthopedic Surgery	Rheumatology	Urology	Ophthalmology	Otolaryngology	Psychiatry
Inaccessible building	9 (4)	1 (3)	1 (3)	0 (0)	0 (0)	2 (6)	2 (6)	1 (3)	2 (6)
Cannot transfer patient	47 (18)	4 (13)	13 (41)	8 (25)	6 (19)	7 (22)	6 (19)	3 (10)	0 (0)
Would examine without transfer	75 (29)	8 (25)	0 (0)	0 (0)	0 (0)	0 (0)	21 (65)	18 (56)	28 (88)
Staff will transfer to standard table	103 (40)	17 (53)	9 (28)	24 (75)	22 (68)	16 (50)	3 (10)	10 (31)	2 (6)
Mechanical lift or height-adjustable table available	22 (9)	2 (6)	9 (28)	0 (0)	4 (13)	7 (22)	0 (0)	0 (0)	0 (0)
Total	256 (100)	32 (100)	32 (100)	32 (100)	32 (100)	32 (100)	32 (100)	32 (100)	32 (100)

that they planned to manually transfer the patient from the wheelchair to a high table that was not height-adjustable without using a lift. Twenty-two practices (14%) reported the use of height-adjustable tables or a lift for transfer.

Among the 96 practices in the group that “might not require transfer for adequate care,” 5 (5%) reported that the building was inaccessible. Of the 24 practices (25%) that lacked adjustable equipment or reported a need to transfer the patient, 9 said that they could not transfer the patient and 15 explained that they planned to manually transfer the patient from her wheelchair to a standard examination table without a mechanical lift. Most practices (70%) reported that they had equipment that could adjust to the patient while she sat in the wheelchair (for example, otolaryngology and ophthalmology). Psychiatry practices reported that they did not need to move the patient for an examination. Finally, more practices that might not require transfer for adequate care were accessible (95%) than were those that would require transfer (74%) ( $P = 0.029$ ).

### Subspecialty

Among the subspecialties that required transfer, gynecology had the highest rate of inaccessible practices, with 14 of 32 practices (44%) reporting that they could not accommodate the patient. The other subspecialties in this group had proportions of inaccessible practices ranging from 16% to 28%. Among practices that might not require transfer, ophthalmology had the highest number of inaccessible practices (8 [25%]).

### City

Boston and Portland had similar accessibility: More than 80% of practices in these cities reported accessible facilities. Dallas (73%) and Houston (70%) had slightly fewer accessible practices.

## DISCUSSION

In this study, which describes access to subspecialty care for patients with mobility impairment, we found that patients who use a wheelchair and cannot self-transfer encounter important challenges and risks when trying to obtain care from subspecialists. Although few practices were completely inaccessible, several reported a willingness to provide substandard or potentially unsafe care. A few practices reported that they would not perform a full examination, and many planned to use potentially risky manual transfer methods to move the patient from a wheelchair to a standard examination table. Among the subset of practices that could have appropriately examined the patient without transfer, 15 of 66 (23%) planned to transfer the patient manually. Fewer than 10% of practices reported using height-adjustable tables or lifts.

Roetzheim and colleagues (16) reported that disabled enrollees in Medicaid managed care plans were 32% more likely to report problems accessing a specialist than their nondisabled counterparts. We found that this difficulty

was not primarily the result of inaccessible buildings. Rather, the access problems that we described were related to an inability of the practice staff to transfer the patient from a wheelchair to an examination table or, more commonly, lack of equipment and knowledge of the safest method for transferring a 99-kg patient from a wheelchair to an examination table.

Disability experts have questioned the safety of manual transfer for some time (20, 21), and our findings are even more notable given a proposed rule by the Architectural and Transportation Barriers Compliance Board (4). This rule, written in response to language in the Patient Protection and Affordable Care Act of 2010, identifies minimum federal standards for accessibility of diagnostic equipment used by health care providers, including examination tables.

Our findings are also consistent with the reported experience of many disabled patients. Mudrick and colleagues (22) conducted an on-site inspection of primary care practices in California and found that only 8% had height-adjustable examination tables. Iezzoni and colleagues (10) reported that mobility-impaired patients with breast cancer faced inaccessible equipment, fear of injury during transfer, and failure of the physician to perform a proper examination. In a subsequent study, Iezzoni and colleagues (23) reported that mobility limitations affected the diagnosis of and treatment decisions for women with early-stage breast cancer.

A recent survey of Medicare enrollees found that beneficiaries with mobility limitations were more dissatisfied with their health care than those without these limitations (16). Jones and Sinclair (11) reported that minority persons with mobility limitations experienced worse outcomes than able-bodied cohorts.

Of note, 44% of practices in a single subspecialty (gynecology) were inaccessible, approaching the point at which our patient might have difficulty seeing any local gynecologist. The high rate of access problems among gynecologists may be due to the nature of the examination required by a hemiparetic patient with dysfunctional uterine bleeding. Moving the patient to a table and positioning her for a pelvic examination could be extremely risky in the absence of a lift and height-adjustable table.

The American Congress of Obstetricians and Gynecologists has acknowledged that gynecologists face these difficulties. They have suggested that physicians use additional equipment to accommodate such patients (for example, tables with padded leg rests and side rails) and have recommended alternative positioning to better facilitate pelvic examinations in disabled patients (24). Despite these resources, our study is not the first to show disparities in routine gynecologic care for women with disabilities. Iezzoni and colleagues (7) reported that women with major lower-extremity mobility impairment had a much lower adjusted odds ratio of Papanicolaou smears (0.6) than women without such impairment. Other studies have

shown that persons with disabilities are less likely to receive preventive gynecologic services than nondisabled persons (5, 6, 15).

More than 20 years have passed since the Americans with Disability Act became law. Despite this length of time, 20% of practices were not accessible for persons with mobility impairment. The cost (or perceived cost) of making accommodations may be hampering the pace of change. For the study patient, practices would ideally have height-adjustable examination tables and a mechanical lift. The cost of these accommodations is not trivial (height-adjustable examination tables are approximately twice the cost of traditional tables) but is within the budget of most practices. In addition, the disabled access credit provides a way for physicians to offset expenses incurred as they modify their practices to comply with the Americans with Disability Act (25). However, physicians may not be aware of this credit.

Besides costs, other factors may also affect practices' ability to comply with the Americans with Disability Act. Transfer and examination of a patient with substantial mobility impairment may increase appointment time or delay examination room turnover, and insurance providers do not generally provide additional reimbursement for seeing a patient who uses a wheelchair. Patient and staff safety is another consideration. Even with accessible equipment, staff must be trained to perform transfers and some risk for injury remains. In our study, several inaccessible practices cited liability concerns for staff or patient safety. Perhaps most important, however, is our finding that almost all inaccessible practices were willing to explain their reasons for refusing to see a patient who uses a wheelchair. This willingness may indicate that many practices are simply unaware that such a refusal is a violation of federal law.

Our study has limitations. We used a deceptive research technique because we determined that it was justified given the scientific value of the knowledge gained (19). However, this method limited our ability to obtain more information (for example, why the practice chose a particular transfer method).

We limited our inquiry to subspecialists because we were primarily interested in access to subspecialty care, but accessibility issues may also exist for primary care practices. We limited our inquiry to 8 subspecialties in 4 cities, which may not be representative of all subspecialists or the United States as a whole. The fictional patient was both hemiparetic and obese, which may represent an extreme example of mobility impairment. However, she was similar to many patients we see in practice.

In conclusion, patients with mobility limitations may have difficulty accessing subspecialists, a finding that is related to issues of transferring from the wheelchair to an examination table rather than those of building accessibility. These results show the need for better awareness among providers about the requirements of the Americans

with Disability Act and the standards of care for patients with mobility impairment.

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**Disclaimer:** All authors have contributed substantially to the manuscript and have met the criteria for authorship. Dr. Lagu had full access to all of the data in the study and takes responsibility for their integrity and the accuracy of the data analysis.

**Potential Conflicts of Interest:** Disclosures can be viewed at [www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M12-2815](http://www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M12-2815).

**Reproducible Research Statement:** *Study protocol:* Available from Dr. Lagu (e-mail, [lagutc@gmail.com](mailto:lagutc@gmail.com)). *Statistical code and data set:* Not available.

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## References

1. Brault M. Americans with Disabilities: 2005. Current Population Reports, P70-117. Washington, DC: U.S. Census Bureau; 2008. Accessed at [www.census.gov/prod/2008pubs/p70-117.pdf](http://www.census.gov/prod/2008pubs/p70-117.pdf) on 14 December 2012.
2. Americans with Disabilities Act of 1990, As Amended. 42 USC §12102 (2). Accessed at [www.ada.gov/pubs/adastatute08.htm](http://www.ada.gov/pubs/adastatute08.htm) on 14 December 2012.
3. U.S. Department of Health and Human Services. Americans with Disabilities Act: Access to Medical Care for Individuals with Mobility Disabilities. Accessed at [www.ada.gov/medcare\\_mobility\\_ta/medcare\\_ta.pdf](http://www.ada.gov/medcare_mobility_ta/medcare_ta.pdf) on 14 December 2012.
4. United States Access Board. Proposed Accessibility Standards for Medical Diagnostic Equipment. Accessed at [www.access-board.gov/mde/nprm.htm](http://www.access-board.gov/mde/nprm.htm) on 14 December 2012.
5. Chan L, Doctor JN, MacLehose RF, Lawson H, Rosenblatt RA, Baldwin LM, et al. Do Medicare patients with disabilities receive preventive services? A population-based study. *Arch Phys Med Rehabil*. 1999;80:642-6. [PMID: 10378489]
6. Diab ME, Johnston MV. Relationships between level of disability and receipt of preventive health services. *Arch Phys Med Rehabil*. 2004;85:749-57. [PMID: 15129399]
7. Iezzoni LI, McCarthy EP, Davis RB, Harris-David L, O'Day B. Use of screening and preventive services among women with disabilities. *Am J Med Qual*. 2001;16:135-44. [PMID: 11477958]
8. Iezzoni LI. Eliminating health and health care disparities among the growing population of people with disabilities. *Health Aff (Millwood)*. 2011;30:1947-54. [PMID: 21976339]
9. Iezzoni LI, Frakt AB, Pizer SD. Uninsured persons with disability confront substantial barriers to health care services. *Disabil Health J*. 2011;4:238-44. [PMID: 22014671]
10. Iezzoni LI, Kilbridge K, Park ER. Physical access barriers to care for diagnosis and treatment of breast cancer among women with mobility impairments. *Oncol Nurs Forum*. 2010;37:711-7. [PMID: 21059583]
11. Jones GC, Sinclair LB. Multiple health disparities among minority adults with mobility limitations: an application of the ICF framework and codes. *Disabil Rehabil*. 2008;30:901-15. [PMID: 18597985]

12. Lee JC, Hasnain-Wynia R, Lau DT. Delay in seeing a doctor due to cost: disparity between older adults with and without disabilities in the United States. *Health Serv Res.* 2012;47:698-720. [PMID: 22092264]
13. McCarthy EP, Ngo LH, Roetzheim RG, Chirikos TN, Li D, Drews RE, et al. Disparities in breast cancer treatment and survival for women with disabilities. *Ann Intern Med.* 2006;145:637-45. [PMID: 17088576]
14. Parish SL, Huh J. Health care for women with disabilities: population-based evidence of disparities. *Health Soc Work.* 2006;31:7-15. [PMID: 16550843]
15. Reichard A, Stolze H, Fox MH. Health disparities among adults with physical disabilities or cognitive limitations compared to individuals with no disabilities in the United States. *Disabil Health J.* 2011;4:59-67. [PMID: 21419369]
16. Roetzheim RG, Chirikos TN, Wells KJ, McCarthy EP, Ngo LH, Li D, et al. Managed care and cancer outcomes for Medicare beneficiaries with disabilities. *Am J Manag Care.* 2008;14:287-96. [PMID: 18471033]
17. Smith DL. Disparities in health care access for women with disabilities in the United States from the 2006 National Health Interview Survey. *Disabil Health J.* 2008;1:79-88. [PMID: 21122715]
18. Bisgaier J, Rhodes KV. Auditing access to specialty care for children with public insurance. *N Engl J Med.* 2011;364:2324-33. [PMID: 21675891]
19. Slone L, Hull J. Deception of research subjects. In: *Institutional Review Board: Management and Function.* 2nd ed. Sudbury, MA: Jones & Bartlett; 2006:210-5.
20. Iezzoni L, O'Day B. *More than Ramps: A Guide to Improving Health Care Quality and Access for People with Disabilities.* New York: Oxford Univ Pr; 2006.
21. Kirschner KL, Breslin ML, Iezzoni LI. Structural impairments that limit access to health care for patients with disabilities. *JAMA.* 2007;297:1121-5. [PMID: 17356035]
22. Mudrick NR, Breslin ML, Liang M, Yee S. Physical accessibility in primary health care settings: results from California on-site reviews. *Disabil Health J.* 2012;5:159-67. [PMID: 22726856]
23. Iezzoni LI, Park ER, Kilbridge KL. Implications of mobility impairment on the diagnosis and treatment of breast cancer. *J Womens Health (Larchmt).* 2011; 20:45-52. [PMID: 21034276]
24. Cox R, Signore C. *Reproductive Health Care for Women with Disabilities.* Accessed at [www.acog.org/About\\_ACOG/ACOG\\_Departments/Women\\_with\\_Disabilities/Interactive\\_site\\_for\\_clinicians\\_serving\\_women\\_with\\_disabilities](http://www.acog.org/About_ACOG/ACOG_Departments/Women_with_Disabilities/Interactive_site_for_clinicians_serving_women_with_disabilities) on 14 December 2012.
25. Expenditures to Provide Access to Disabled Individuals. 26 USC §44 (1990).

#### FAST TRACK REVIEW

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