## SOUNDING BOARD

# The Axes of Access — Improving Care for Patients with Disabilities

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It was Friday afternoon, and I had promised my patient's family that I would discharge her. Despite trying all day to make a follow-up appointment with the appropriate subspecialist, I could not find a practice within 50 miles of her home that could accommodate a patient who used a wheelchair. After I explained the situation and apologized, the patient said to me, "You know, Doctor, it's like discrimination or something."

The statement of the patient in the vignette is supported by a growing body of evidence that persons with disabilities confront barriers when attempting to access the health care system.<sup>1-7</sup> Although the 1990 Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act require that health care providers provide "full and equal access to care for persons with disabilities,"<sup>8,9</sup> research has shown that patients with disabilities may be transferred in an unsafe manner onto examination tables and other equipment, receive less preventive care and fewer examinations, and report longer waits to see subspecialists.<sup>1-6</sup>

These studies have identified many problems but have not provided a clear route to care that is accessible to everyone, regardless of functional abilities (i.e., "universally accessible care"). This may be the case because barriers to access are the result of a variety of physical, policy, procedural, and attitudinal factors.<sup>6</sup> In this Sounding Board, we begin to better characterize these barriers and identify domains (or axes) that must be improved to achieve health care accessibility: physical access, implementation of policies and procedures that facilitate access, and communication access (Table 1).

## PROMOTING PHYSICAL ACCESS

So I told my doctor I need a Pap smear . . . and I need a table that lowers so I can scoot over from my chair. She said, "That's a great idea. Find a doctor who has one

[a height-adjustable table] and I'll refer you." — Patient who uses a wheelchair.<sup>10</sup>

Physically accessible health care environments are free of physical barriers to care. This includes access to elevators, ramps, parking, doorways, bathrooms, and medical diagnostic equipment, such as examination tables, weight scales, and radiographic and ophthalmologic equipment. Previous research has emphasized that universal accessibility is about "more than ramps."<sup>11</sup> The inability to enter a building is rarely the reason that patients cannot be accommodated.<sup>4</sup> Inaccessible equipment is a far more common barrier. In one study of outpatient settings that evaluated access for a patient who could not transfer independently, 20% of subspecialty practices refused to book an appointment because they were unable to transfer the patient to an examination table.4 Manufacturers of examination tables and weight scales produce equipment that is intended to improve accessibility, but two recent studies showed that less than 10% of outpatient practices have a height-adjustable table.4,12 Other studies describe equipment-related barriers in both inpatient settings and specialized outpatient facilities (e.g., radiology, dentistry, and oncology),3,13-15 and strong anecdotal evidence suggests that equipment access poses substantial problems in other health care settings.<sup>10</sup>

In this context, one critical factor is the lack of clear standards for accessible medical equipment. Although the ADA addresses building access, it does not specify standards for medical diagnostic equipment. Partially in response to this gap, Section 4203 of the 2010 Patient Protection and Affordable Care Act required the creation of standards for accessible medical equipment for adults. These standards are being promulgated by the Architectural and Transportation Barriers Compliance Board (also known as the U.S. Access Board), a federal agency that sets

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## Table 1. The Axes of Access.

## Physical access

Definition: The health care environment, including care settings, is free of physical barriers to care.

Strategies

Parking is accessible.

The building can be entered.

The elevator is functional.

Doors and hallways are kept clear.

Bathrooms are accessible, including toilet, sink, and grab bars

Equipment is accessible.

Examination tables are height-adjustable.

Specialized accessible equipment is available (e.g., diagnostic imaging, ophthalmic equipment, dental equipment).

Policies and procedures are optimized to ensure that physical access is maintained.

## Policy and procedural access

Definition: Policies and procedures promote accessibility of scheduling, staffing, and administrative resources.

#### Strategies

Policies and procedures should be reviewed and include the following:

Patients are asked about needs for accommodation at the time of the first interaction with a health care provider.

Any special needs are flagged in the scheduling system and electronic record.

When patients are expected for an appointment, accessible equipment and staff are reserved.

Service animals that are qualified under ADA provisions are allowed.

Staff are correctly trained in disability etiquette (e.g., a wheelchair is part of the patient's personal space) and methods of transfer.

Communication policies are reviewed.

## Communication access

Definition: Provider and system factors do not limit a patient's ability to make an appointment, arrange for follow-up, understand goals of care, or adhere to prescribed therapy.

#### Strategies

Printed forms are available in large font and in modified versions that accommodate patients who have low literacy.

American Sign Language interpreters are available free of charge.

Amplification devices for patients with impaired hearing are accommodated.

E-mail or text messaging is allowed to make appointments and communicate with providers.

Work is done to change systematic problems (e.g., hard-to-read prescription labels).

building and other standards to ensure access for persons with disabilities under the ADA and other mandates<sup>16</sup> in consultation with the Food and Drug Administration. A multistakeholder committee recently made its recommendations to the U.S. Access Board regarding standards for accessible equipment.<sup>17</sup> Once the final standards are approved, the Department of Justice will determine how to apply these regulations to the health care delivery system.

These new standards and the eventual Department of Justice requirements are likely to change the equipment marketplace, since manufacturers will have explicit guidance for new product development. In the clinical realm, these recommendations are an opportunity for physicians, administrators, and insurers to rethink physical access and, in particular, to recognize their legal requirement to provide equal access to medical equipment. Clinical leaders will need guidance and education in order to best implement these changes, a role that can be filled by disability advocacy groups, professional organizations, insurers, and equipment manufacturers. Making the information available is not enough, however. Physicians and administrators who are purchasing new equipment must choose to buy equipment that meets accessibility standards. In addition, health care providers and administrators must make concurrent changes in policies and procedures so that when accessible equipment is needed, it is available and the staff is trained in its use.

## CHANGING POLICIES AND PROCEDURES TO FACILITATE ACCESS

When I made my appointment, I asked for a specific room with an adjustable table and extra time to transfer. The day of the appointment came, and the patient care technician said, "you're only booked for a fifteen-minute appointment, so I don't think he can see you today." — Patient who uses a wheelchair.<sup>10</sup>

Patients with disabilities frequently describe health care encounters in which the appropriate equipment is on-site but they still have trouble accessing care. The patient who is quoted above faced limited options: wait until the resources are available, reschedule the appointment, or settle for lower-quality care (e.g., forgoing a physical examination). To prevent this from happening, administrators and clinical leaders must ensure that their health-system policies and procedures promote universal accessibility of scheduling, staffing, and administrative resources.

When the patient-clinician relationship is first being established, intake forms can be used to encourage all patients to list their accommodation needs. These data are then trans-

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ferred into the medical record and the scheduling systems, either of which can alert the clinicians and staff to patients' needs for accommodation before arrival at the health care setting. In the above-mentioned scenario, for example, the room in the practice with the heightadjustable table would be reserved for the patient when she schedules her appointment, the length of time for the appointment would be entered into the record, and staff members who could assist with transfer would be available at the time of the appointment.

In addition to policies regarding scheduling and staffing, other policies and procedures should be reviewed. For example, all health care facilities should have an established method for keeping hallways clear to allow adequate room for wheelchairs. Staff training should include information on correct methods for transferring patients with disabilities and the use of accessible equipment, both to ensure patient safety and to limit staff injuries.

Although these changes may seem logistically challenging, most clinicians currently use at least some of these methods to address other patient needs. For example, flags in the medical record indicate known allergies. In some cases, health care systems have altered their policies or equipment (e.g., universal use of nitrile gloves) to reduce the likelihood that patients with allergies will be exposed to allergens. In addition, office staff members receive training for many other aspects of care and for safe use of equipment. Some professional organizations, such as the American Nurses Association, are requesting better training and a set of uniform safety standards for lifting patients.18 The key to successfully implementing changes in policies and procedures is for the leaders of practices or health systems to commit to identifying patients' accommodation needs early in the therapeutic relationship. This requires that communication barriers between health care professionals and patients also be addressed.

## ENSURING EFFECTIVE COMMUNICATION

He started asking me questions . . . . I would get out a word or two and then he would cut me off and go on to the next question. — Patient with impaired speech.<sup>10</sup>

Communication access barriers include provider or system factors that limit a patient's ability to make an appointment, arrange for follow-up, understand the goals of care, or adhere to a prescribed therapy. Such factors include a broad range of issues that require accommodations for patients with visual or hearing impairments, developmental disabilities, and other cognitive impairments.

This breadth of factors represents a challenge to clinical leaders. We recommend, as a first step, instituting a few key interventions and, simultaneously, changing policies or procedures to allow for flexibility as new challenges arise. There are several interventions that all health systems and practices should implement. First, they should make available all printed forms (e.g., discharge instructions, release forms, and consent forms) in large font for patients with visual impairments and in modified versions that accommodate patients who have low literacy or cognitive impairments. Second, for patients who are deaf, they should provide American Sign Language interpreters or a technological equivalent, free of charge to the patient, since charging for accommodation is a violation of federal law.9 Third, for patients with impaired hearing, they should consider purchasing amplification devices.19 Fourth, they should facilitate the use of e-mail or text messaging for making appointments and communicating with providers. Fifth, they should work to change systemic problems that pose unusual difficulties for persons with disabilities (e.g., since prescription labels can be very difficult to read, providing medication instructions in another format, such as large-print forms or e-mail messaging). And finally, they should revisit policies and procedures to minimize communication barriers. These policies will benefit not only patients with disabilities but also non-English speakers and patients who have low health literacy.

## UNIVERSAL ACCESS AS AN INVESTMENT

Although nearly a quarter century has passed since the ADA was signed, patients with disabilities still frequently receive substandard care.<sup>1-6</sup> We have described some of the ways to address these disparities, such as the removal of equipment-related barriers, simultaneous review of policies and procedures to facilitate access for patients with disabilities, and the elimination of barriers to communication.

We anticipate that these recommendations will encounter some resistance from practition-

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ers and administrators because they require initial investments of money and time. However, we believe that the financial effects of these changes can be minimized and that the investment of time may result in efficiency gains later. As a case in point, undertaking programmatic changes (e.g., intake forms specifying needs) to improve the conduct of administrative tasks requires little additional investment and could minimize scheduling disruptions. The quality of care and patients' experience will improve through reduced waiting and increased personalized care.

Purchasing accessible equipment is associated with some increased upfront costs. Height-adjustable examination tables can cost several thousand dollars more than standard fixed-height tables, although tax credits allow up to 50% of costs of equipment that is ADA-compliant for purchases up to \$5,000 per year. As more practices and systems purchase equipment that is consistent with new accessibility standards, economies of scale will be created and the cost of such equipment may go down. Accessible equipment also minimizes the assistance that is required for transferring patients, which will reduce staff injuries and improve productivity and employee satisfaction. In addition, clinicians and administrators do not have to purchase new equipment all at once. As new items are needed, physicians or administrators can choose to purchase equipment that is accessible rather than equipment that is not. Future regulations from the Department of Justice will be more specific about the length of time that is allowed to achieve compliance with the new equipment standards.

The greatest challenge in achieving universal accessibility in health care settings may not be the cost but the need for a change in mindset on the part of clinicians and administrators. A lowcost and effective way for health systems to revise their policies and procedures is to include patients with disabilities on the committee performing the review. Allowing patients to play a role in the process will highlight procedural issues that administrators and clinicians would miss. Simultaneously, this process will empower patients and allow them to see the organization's commitment to achieving accessibility.

These changes can go a long way toward resolving many of the barriers that compromise care for patients with disabilities and could improve provider efficiency, reduce staff injuries, and diminish the risk of lawsuits or fines related to accessibility. The law requires us to provide equal access for persons with disabilities, but it is also our professional responsibility as clinicians and health care leaders.<sup>6</sup> Most important, prioritizing universal accessibility is a direct response to our patients' needs and desires, which will lead to the improved experience of patients and the overall quality of health care.

Dr. Iezzoni was the chair of the Medical Diagnostic Equipment Accessibility Standards Advisory Committee, which provided advice to the U.S. Access Board. The views expressed in this article are those of the authors and do not represent the official views of the U.S. Access Board.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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