IMPORTANCE OF ACCESSIBLE EXAMINATION TABLES, CHAIRS and WEIGHT SCALES

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- Health Care Facilities Access
- Improving Accessibility with Limited Resources
- Choosing and Negotiating an Accessible Facility Location
- Review of Legal Research on Accessible Medical Equipment
- Importance of Accessible Mammography Equipment
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INTRODUCTION

Health care providers should have accessible examination tables, chairs and weight scales for these reasons:

1. Improves quality of care for people with disabilities and activity limitations;
2. Complies with legal obligations under Title II or Title III of the Americans with Disabilities Act;
3. Serves Individuals with disabilities and activity limitations who represent a sizable portion of the population;
4. Reduces health care professionals’ workplace injuries; and
5. Takes advantage of the federal tax incentives for improving accessibility.

1. a. IMPROVED QUALITY OF CARE FOR PEOPLE WITH DISABILITIES AND ACTIVITY LIMITATIONS

When a physician is unable to perform an appropriate examination because a patient cannot get onto an examination or procedural tables and chairs, or be weighed on a standard scale, the patient may receive a lesser quality of health care. The patient might be misdiagnosed, because the physician may not have sufficient information. Alternatively, the patient might miss the benefit of early detection of a developing condition such as cancer. By providing accessible examination tables, physicians improve the quality of care provided to people with disabilities and activity limitations. In addition, the use of an accessible exam table may also reduce the frequency and time required in using a lift team, lift equipment and/or providing transfer assistance from staff.

In addition to getting on the table, the low height of the table allows many people to sit with their feet still on the floor, eliminating strain on their back and legs. It also allows people who prefer a chair to remain in the chair while waiting for the provider and then to easily move on to the table. Exam tables with greater height flexibility decrease the need for staff assistance and help the patient’s maintain their independence, confidence and dignity.

Lack of accessible equipment may cause doctors and other health professionals to forgo, omit, or not recommend procedures or elements of procedures for people with disabilities. Whereas, having these procedures are otherwise commonplace for people without disabilities and limitations. For example,

“When a wheelchair user began to have irregular vaginal spotting, she tried to ignore it. She had not had a pelvic exam for a number of years because she wasn’t able to find a facility where she could get on the examination table. When she finally did find such a facility, after much searching, she was diagnosed with endometrial cancer. Had accessible exam tables been in routine use in gynecological clinics and offices, this woman might have been diagnosed and treated earlier.”
1. b. INDIVIDUALS WITH DISABILITIES REPRESENT A SIZABLE PORTION OF THE POPULATION

According to the U.S. Census of 2000, people with disabilities represent 19.3 percent of the 257.2 million people who were aged 5 and older in the civilian non-institutionalized population or nearly one person in five. Fifty percent of people over age 65 have some form of disability.²

With the average age of patients on the rise, more people will require easier access to equipment. The average life span today is 75 years, and is projected to rise to 85 years by 2050. The Census Bureau cites that the two highest factors of disabilities include arthritis or rheumatism and back or spinal injuries. All of these conditions can cause patients difficulty in getting on and off an exam tables, chairs, and weight scales.³

In addition to improved access for people with physical disabilities and activity limitations, accessible medical equipment makes life easier and safer for everyone.

Tables and chairs that can be lowered to 17”-19” from the floor make transferring easier for wheelchair users and people with activity limitations. This includes people with conditions that interfere with mobility, walking, climbing, using steps (joint pain, short stature, pregnancy, fatigue, respiratory and cardiac conditions); use mobility devices (e.g. canes, crutches, walkers); and have temporary activity limitations such as post surgical restrictions, or orthopedic injuries.
2. ACCESSIBLE EQUIPMENT IN MEDICAL FACILITIES
   2. a. REDUCTION OF WORKPLACE INJURIES

When the height of an examination table or diagnostic chair is not adjustable, wheelchair users and people with other activity limitations may need to be lifted or assisted onto this equipment. This type of lifting can cause back or other musculoskeletal injuries to staff. Once the patient is on the equipment an adjustable-height feature also enables health care providers to elevate the equipment to a comfortable height for conducting an examination or procedure, thus, decreasing the risk of back strain or other injuries to these health care professionals.\textsuperscript{xii}

“The Occupational Safety and Health Administration (OSHA) estimated that 1.8 million US workers develop work-related musculoskeletal disorders. According to the US Department of Labor’s Bureau of Labor Statistics, healthcare-related services reported over 59,000 musculoskeletal injuries in 1999. The majority of the injuries reported were strains and sprains to the back and shoulder caused by overexertion in lifting and resulted in the employee being off of work for several days.\textsuperscript{xiii}

Nursing is one of the riskiest occupations in the US, because it is most associated with work-related musculoskeletal disorders and back injuries. Nursing has the second-highest incidence of all types of non-fat\textsuperscript{al} work-related injuries. 1998 injury data show that nearly 12 out of 100 nurses in hospitals and 17.3 out of 100 nurses working in nursing homes report work-related musculoskeletal injuries, including back injuries, which is about double the rate for all other industries combined.\textsuperscript{xiv}

One of the responsibilities of many nurses is getting patients onto (and often, off) the examination table. The height of the table determines how much bending and reaching is required to accomplish these tasks. However, the height of nurses varies, and so a simple-to-operate, height-adjustable table is important to allow the height to be appropriately adjusted to the nurse’s height, to suit the nurse and facilitate a safer transfer for the patient.\textsuperscript{xv}

“...this equipment allows us to give quality care that is safe for the patient as well as safe for us.”

Linda Kent, Certified Radiology Technician
Kaiser Permanente, Folsom, CA
2. b. TAX CREDITS UNDER SECTION 44 OF TITLE 26 IN THE IRS CODE.\textsuperscript{xvi}

The “Disabled Access Tax Credit” (Internal Revenue Code, Title 26, Section 44), is allowed for expenditures that are incurred in order to comply with the Americans with Disabilities Act (ADA). This enables an eligible small business to elect to take a nonrefundable tax credit equal to half of the expenditures it makes on eligible accommodations that exceed $250. The maximum credit a business can elect to take in any tax year is $5,000 for eligible expenditures of $10,250 or more. (See: HFCDHP Brief: Disability Access Tax Incentives)

2. c. MEDICAL CARE DISABILITY DISCRIMINATION CASES

Since the ’90s, a growing number of private and public disability discrimination cases have been successfully filed. Individuals with disabilities and the disability community have become increasingly public and diligent in asserting their civil rights to equal access, specifically, requiring the courts to enforce ADA requirements in the health care field.

Several examples from the Department of Justice include:

\[\text{\textbullet~ A Virginia medical center allegedly refused to treat a wheelchair user during her scheduled appointment because staff said they could not lift her on to the examining table. As a result, the medical center:}\]

\[\begin{itemize}
\item Completed a survey of current examination tables;
\item Developed a capital budget to purchase motorized exam tables; and
\item Provided training to staff on ADA requirements.\textsuperscript{xvii}\end{itemize}\]

\[\text{\textbullet~ A Washington, D.C. Radiology practice allegedly failed to provide adequate assistance to a wheelchair user to help her transfer to an examination table. The practice:}\]

\[\begin{itemize}
\item Purchased an additional height-adjustable examination table; and
\item Designated three lead medical assistants as ADA patient advocates to help people with mobility disabilities receive services as quickly and efficiently as other patients.\textsuperscript{xviii}\end{itemize}\]

\[\text{\textbullet~ Georgetown University Hospital allegedly failed to reasonably accommodate a wheelchair user by providing assistance to help her transfer to an examination table in its obstetrics and gynecology clinic. After being sued, Georgetown agreed to:}\]

\[\begin{itemize}
\item Pay the plaintiff $15,000.00; \newline
\item Pay the United States a civil penalty in the amount of $10,000; and \newline
\item Undertake a facility-wide review of related accommodation and accessibility problems.\textsuperscript{xix}\end{itemize}\]
A wheelchair user recommended to her California Family Practice physician that they borrow or purchase an adjustable examination table; the practice allegedly advised the patient to obtain her yearly examination from another physician, because the practice was “unable to readily purchase an adjustable examination table or lift because of budget constraints.” As a result, the practice agreed to:

- Purchased a 17-19” from floor height-adjustable examination table;
- When scheduling appointments, staff will ask if the patient needs: modifications of a policy, special assistance, and/or auxiliary aids or services because of a disability; and
- All staff will receive training in: Disability sensitivity and awareness, ADA Title III, and techniques for lifting and transferring people with mobility disabilities.xx

In November 2005, a settlement was reached with the largest private hospital in the nation’s capital, Washington Hospital Center (WHC). This settlement is one of the first of its kind to address access to hospital facilities and equipment for patients with mobility impairments and other disabilities. Under this settlement the hospital will:

- Remove barriers throughout the hospital;
- Procure accessible exam tables for every department that uses exam tables (after the date of the agreement, all new exam tables and chairs purchased by WHC will be accessible);
- Survey all equipment and purchase accessible equipment where needed;
- Review and revise its polices, implement special procedures for patients with spinal cord injuries; and
- Provide training to its staff to ensure implementation and use of its new policies and equipment.xxx

In October 2009, a settlement was reached with the Beth Israel Deaconess Medical Center (BIDMC) in Brookline, Mass. BIDMC, a teaching hospital affiliated with Harvard University, encompassing more than 30 buildings, three community health clinics, and operates as a quaternary acute care facility and level one trauma center. The agreement requires, among other things:

- Taking steps to ensure that a minimum of 10 percent of its existing patient rooms are accessible, including accessible toilet facilities, and are dispersed through its clinical services;
- Ensuring each department and clinical practice provides at least one accessible examination table that lowers to 17-to-19 inches from the floor;
- Surveying existing hospital and patient care facilities and equipment, including patient beds, exam tables, lifts, and radiologic and diagnostic equipment, for compliance with ADA standards; and implementing a system to ensure that BIDMC purchases accessible equipment where they are commercially available;
- Develop and implementing a barrier removal plan;
- Reviewing hospital policies and train staff to address the needs of individuals with disabilities; and
- Appointing an ADA officer to oversee implementation of the agreement.xxxi
STRUCTURED NEGOTIATIONS

In April 2008, the Boston Center for Independent Living (BCIL) entered into a landmark agreement with Partners HealthCare and its two flagship hospitals, Brigham and Women’s Hospital (BWH) and Massachusetts General Hospital (MGH). The comprehensive plan will be implemented over six years. Gary Gottlieb said “This initiative is intended to go well beyond providing ramps and eliminating architectural barriers. It is designed to build a stronger partnership between health care providers and patients with disabilities, and help to fundamentally change the culture of access and care for people with disabilities.” Greater Boston Legal Service’s Dan Manning called the initiative a “model for hospitals in Massachusetts and nationwide.”

The agreement includes:

- A detailed survey of both hospitals and their level of compliance with the ADA as well as ongoing collaboration with BCIL on all issues related to people with disabilities;
- Removing architectural barriers in hospitals, off hospital campus physicians’ offices and health centers (including exam rooms, patient rooms, treatment rooms, waiting areas, gift shops and parking areas);
- Purchasing additional medical equipment and devices that are accessible for people with disabilities (including wheelchair scales, power adjustable exam tables, power door openers, mammography);
- Modifying hospital policies and procedures that address issues related to the care of people with disabilities; and
- Developing a training program for all staff including physicians, nurses and support staff that interact with patients and visitors.

In November 2008, the University of California Medical Center (UCSF) signed a comprehensive settlement agreement to evaluate Medical Center programs, policies, services and facilities and improve accessibility for persons with disabilities where necessary. Among other things, UCSF agreed to:

- Modify in-patient bathrooms to make them accessible to patients who use wheelchairs;
- Conduct extensive review of policies and procedures affecting people with disabilities, making enhancements where needed;
- Evaluate the availability of accessible medical equipment in UCSF patient care facilities, and purchasing and installing accessible medical equipment where necessary; and
- Update its patient registration systems, and policies for effectively communicating with patients and visitors with disabilities.
**PRIVATE ACTIONS**

In a private action, *Metzler v. Kaiser Permanente of California, 2001*, an agreement settled a class-action lawsuit filed against Kaiser Permanente, on behalf of all its California Members with disabilities. The lawsuit argued that Kaiser discriminated against patients with disabilities by giving inferior medical care. Terms of the agreement include:

- Removal of architectural barriers;
- Installation of accessible medical equipment, including wheelchair accessible scales;
- Review of Kaiser Permanente’s policies, procedures and programs to improve access to quality health care for people with disabilities; and
- Develop a training program to educate its health care professionals about treating people with disabilities; and
- Development of a complaint handling system to meet the needs of people with disabilities.

**2. d. COMPLYING WITH THE ADA**

The major pieces of federal legislation governing equal access to health care services for individuals with disabilities are the Rehabilitation Act (Rehab Act) and the Americans with Disabilities Act (ADA). These laws constitute a national mandate prohibiting discrimination based on disability in the provision of goods and services available to the public.

Section 504 of the Rehab Act prohibits any organization that receives federal financial assistance from denying individuals with disabilities equal access to the services. For example, hospitals, clinics, and other health care facilities that accept Medicaid, Medicare, or any other form of federal funding must comply with the Rehab Act. Section 504 states, “No otherwise qualified individual with a disability . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” If the provider serves just one Medicare or Medicaid beneficiary, that provider’s entire operations must comply with the Rehab Act. Medicare and Medicaid managed care plans must provide programmatic access to all its enrollees with disabilities.

ADA’s Title II extends the Rehab Act’s requirements to all state and local government activities. All health care providers who offer health care services, either directly or through contractual arrangements, to Medicare or Medicaid beneficiaries must comply with the Rehab Act because Medicare and Medicaid funding is considered federal financial assistance.

All health care providers, including hospitals, nursing homes, psychiatric and psychological services, private physicians’ offices, diagnostic centers, physical therapy centers, and health clinics, are places of public accommodations and therefore must comply with Title III.
3. EXAMINATION, PROCEDURAL, AND DIAGNOSTIC TABLES AND CHAIRS

3. a. SIDE-by-SIDE COMPARISON

ACCESSIBLE Height-adjustable examination table (below left) lowering from 18 inches (ground to top-of-cushion) vs.
NON-ACCESSIBLE - Standard (box) examination table (below right) fixed height of 24 inches (ground to top-of-cushion)

3. b. SAMPLES OF EXAMINATION TABLES AND CHAIRS

Below are examples of examination / treatment tables and chairs with some access features that include: lowering to a minimum of 17 to 19 inches from ground to top-of-cushion, swing away arms, and higher weight capacity.

1. Standard Examination Tables 6. Infusion Recliners
2. Bariatric Examination Tables 7. Phlebotomy / ENT Chair
4. Podiatry Chairs 9. Dental Chairs
5. Treatment Tables

1. Standard Examination Tables

Figure 3. i. Midmark Barrier-Free Examination Table 222/223. Lowers to 18” floor to top-of-cushion. 400 lb. weight capacity.

Figure 3. ii. Brewer Power Access Examination Table. Lowers to 18” floor to top-of-cushion. 450 lb. weight capacity.
2. Bariatric Examination Tables

Figure 3. 3. **UMF 4070 Power Exam Table.** Lowers to 19” floor to top-of-cushion. 600 lb. weight capacity.

Figure 3. 4. **Midmark 625 Barrier-Free Exam Table.** Lowers to 18” floor to top-of-cushion. 650 lb. weight capacity.

Figure 3. 5. **Midmark Bariatric Treatment Table.** Height lowers to 18” floor to top-of-cushion, 54” wide, 800 lb. weight capacity.

Figure 3. 6. The **Welner Enabled Legacy Examination Table.** Lowers to 18” floor to top-of-cushion, 54” wide, 650 lb. weight capacity.

Figure 3. 7. **UMF – Bariatric Exam Table.** Height lowers to 18” floor to top-of-cushion, 30” wide, 800 lb. weight capacity.
3. Procedural Tables and Chairs (Dermatology, ENT, Podiatry)

Figure 3. 8. UMF 4010 Power Procedure Table. Height lowers to 19” floor to top-of-cushion width 27,” 600 lb. weight capacity.

Figure 3. 9. Midmark 622/623 Procedural Table. Height lowers to 18” floor to top-of-cushion. 54” wide, 450 lb. weight capacity.

4. a. Podiatry

Figure 3. 10. UMF 5016 Power Podiatry Chair. Lowers to 19” floor to top-of-cushion. 550 lb. weight capacity.

Figure 3. 11. Midmark 647 Barrier-Free® Power Podiatry Chair. Lowers to 19” floor to top-of-cushion. 450 lb. weight capacity.

5. Treatment Tables (Physical Therapy, Orthopedics, Rehabilitation and Complementary Medicine, Chiropractic, and Massage)

Figure 3. 12. Huasmann Model 4756 Powermatic Table. Height lowers to 19” floor to top-of-cushion, 27” wide, 400 lb. weight capacity.

Figure 3. 13. Chattanooga Group Adapta® 340 Treatment Table - Three Section. Height lowers to 18” floor to top-of-cushion, 32” wide.

Brief: Importance of Accessible Examination Tables, and Weight Scales

Center for Disabilities Issues and the Health Professions
• Orthopedics/Casting

![Orthopedics/Casting](image1)

Figure 3. 14 Oakworks PT300-31 in width 31," 550 lb. weight capacity.

• Ortho. / Phys. Med. / Rehab. Storable Mat

![Ortho. / Phys. Med. / Rehab. Storable Mat](image2)

Figure 3. 15 Oakworks – Storable Mat. Height lowers to 16” floor to 25” top-of-cushion. Width – 33", 35" and 40” 550 lb. weight capacity.

• Massage / Chiropractic

![Massage / Chiropractic](image3)

Figure 3. 16 Earthlite - Ellora Massage Table. Height lowers to 17” floor to 36” top-of-cushion. Widths 25”, 27”, and 30”, 650 lb. weight capacity.

Figure 3. 17 ProLuxe Valencia. Height lowers to 18” floor to 34” top-of-cushion. Width – 31”, 550 lb. weight capacity.

6. Infusion Recliners

![Infusion Recliners](image4)

Figure 3. 18 Winco Medical Swing Away Arm CareCliner - 694N, Seat height 21” floor to cushion. Swing away arms provide access and ease of entrance and exiting for persons with mobility limitations, wheelchair and scooter users.

Note: while access features include swing-away side arms, the seat height of 21” exceeds the recommended maximum of 19.”
7. Phlebotomy / ENT Chair

Figure 3. 19. UMF 8678 Power Phlebotomy / ENT Chair. Lowers to height of 19” and maximum height of 35” floor-to-seat, 375 lb. weight capacity.

Figure 3. 20. Winco 2587 - Power Designer Blood Drawing Chair. Lowers to 15.5” and maximum height of 27” floor-to-seat, 300 lb. weight capacity.

8. Ophthalmology Chairs, Chair Glides, & Equipment Tables

Figure 3. 21. Chair Glides. Above, examples of an Optometry chair on glider (below) sliding back approximately 30 inches, allowing for some wheelchair positioning.

Note: When considering Ophthalmic chairs, access feature may include a 19” seat height (above right); Reliance 980 - lowers to 19” floor to top-of-cushion (with low base option only). Note: many wheelchair users may not be able to transfer due to large base and non-removable footrests.

Figure 3. 22. Chair Glides. Above left: Cal Coast Ophthalmic Instruments Inc., right Reliance Medical.
Ophthalmology Equipment Tables

Figure 3. 23. Above: Chair Mover RPK SALES, INC.

Figure 3. 24. Accessible motorized ophthalmic tables may increase access to testing by mounting potable diagnostic equipment. Above left - Topcon AIT-350W Wheelchair Accessible Instrument Table.
9. Dental Chairs

For those unable to transfer into a standard dental chair, there are options to increase access. For example, a dental chair should be purchased with the option of **double articulating headrest**. This type of head rest can be flipped around to provide neck support behind the wheelchair, given that the office space has allotted for needed wheelchair floor spacing.

![Double Articulating Headrest](image)

**Figure 3. 25:** Standard dental chair with a double articulating replacement head rest.

- **Reclining Platform Dental Chairs**

When designing space for an accessible dental room, an option to consider is the installation or use of a permanent or portable “bucket” or “platform” dental chair. Adequate space is required. Check model for maximum width of platform to allow for larger / wider power wheelchairs.

![Reclining Platform Chair](image)

**Figure 3. 26:** [Design Specific LTD.](http://www.designspecific.co.uk) Compact Wheelchair Reclining Platform. Refer to specification sheet for more information including video, unit dimensions and room layout required at: [www.designspecific.co.uk](http://www.designspecific.co.uk).
3. c. CHOOSING AN ACCESSIBLE EXAMINATION TABLE OR CHAIR:

Desirable features of accessible examination tables and chairs include:

- **Height adjustable, with a minimum height of 17 inches, from floor-to-top of cushion (versus top of table/chair frame).** Provides many wheelchair and scooter users to laterally transfer with less physical lifting from staff, in addition to easier access for other people with mobility limitations including pregnant patients, seniors, and larger patients.

- **Extra-wide cushion top (≥ 24 inches).**

- **Higher weight capacities (≥ 400 lbs) for larger patients.**

- **Adjustable handrails and/or side panels.** Handrails and side panels provide added safety, balance, and stability assistance for getting onto and off the table, in addition to stability and maintaining positioning once on the table.
Rotating Arms Rails | Side Panels

Figure 3. 27. **UMF Patient Assist Armrest** rotates 360 degrees and can be locked into place. Above right: **Midmark** accessories offered for Examination and Procedural Table includes side panels.

- **Foot/ leg supports that can be adjusted and locked.**
- **Articulating knee crutches.** These provide added safety for both the patient and the provider by allowing increased stability and control for patients unable to hold their legs in place.

![Figure 3. 28. Midmark Corporation accessories offered for Barrier Free model 222/2223 Examination Table and 623/623 Procedural Table includes articulating knee crutches.](image)

![Figure 3. 29. Yellofins, www.allenmedical.com.](image)

![Figure 3. 30. Harvey Stirrups™ https://harveystirrups.com.](image)

In addition to the above, the following accessories should be considered for patient safety and comfort:
- **Pillows** that can provide assistance with positioning and stability;
- **Velcro positioning straps** may be needed by some people for added for stability;
Grab bars on walls for tables positioned next to wall provide assistance with getting on and off the tables, as well as turning while patient is lying on table.

Refer to *Tips for Exam Room Selection, Accessible Tables / Chairs & Lifting Assistance* page 34, for a guide on accessible exam table placement and tips on patient transferring assistance and devices.
4. ACCESSIBLE WEIGHT SCALES

Accessible scales are useable by all people with and without disabilities including wheelchair users, people with activity limitations, and larger people who may exceed a standard weight scale limit. This includes people with conditions that interfere with mobility, walking, climbing, using steps (joint pain, short stature, pregnancy, fatigue, respiratory and cardiac conditions, post surgical conditions, orthopedic injuries.); and people who use mobility devices (e.g., canes, crutches, walkers).

When patients cannot be weighed, they receive a lesser quality of health care. Without an accurate and current weight measurement, chances of missed diagnosis or incorrectly prescribed medication increase. It is well documented that weight gain and obesity can be linked to:

- Cardiovascular Disease;
- High Blood Pressure;
- Unhealthy Cholesterol Levels and Lipid Levels;
- Diabetes;
- Cancer;
- Negative impacts on muscles and bones;
- Reproductive and hormonal problems;
- Effects on the liver and lungs; and
- Many other conditions.

For 18 years, John Lonberg, a man in his early 60’s with quadriplegia from a spinal cord injury, urged his health care clinic to install an accessible exam table and wheelchair scale. The clinic refused. Often no one was available to lift him onto the standard-height table; his clinicians frequently performed cursory examinations, while John sat in his wheelchair.

“It took a while,” he said, “but I gradually realized that I wasn’t getting the same level of care I had received when I could walk, and get on the scale, and climb up on the examination table. Doctors were prescribing dosages based on what they guessed I weighed, so I began thinking maybe I should be weighed.”

“I remember asking my doctor when he was prescribing the amount and the dosage of a particular medication that was very critical for my care, ‘what was he basing it on?’ He said, ‘well, this is based on the record of your size and weight.’ And I said, ‘are you aware the weight you’re looking at in that chart is more than ten years since anyone has had me on a scale?’”

“. . . Nobody had done anything other than... estimating how tight my pants were that morning when I put them on to determine whether I’d been gaining… or losing weight. And that wasn’t really a very scientific way to determine dosage in medications either.”

John Lonberg, Kaiser Permanente Member
John’s story exemplifies a common problem, failure to provide safe and accessible care. This failure produced disastrous consequences, for John and the health care system that now needed to expend a substantial amount of funds for the costs of surgery and lengthy postoperative care.\textsuperscript{xxxii}

In addition, cancer-related weight loss can negatively affect response to therapy, quality of life and survival. Weight loss of just 5 percent is associated with a decreased rate of survival.\textsuperscript{xxxiii}

Unintended weight loss can put older people and people with disabilities at higher risk for infection, depression and death. The leading causes of involuntary weight loss are depression (especially in residents of long-term care facilities), cancer (lung and gastrointestinal malignancies), cardiac disorders and benign gastrointestinal diseases.\textsuperscript{xxxiv}

By providing accessible weight scales you can improve the quality of care provided to people with disabilities and activity limitations.

“Minimal effort is required to set up or operate these scales . . . for many Kaiser Permanente Members the scales restore a vital but sometimes neglected component of a standard medical assessment.”

\textbf{Linda Kent, Certified Radiology Technician Kaiser Permanente, Folsom}

Several types of accessible weight scales are available from a number of manufacturers including wheelchair, platform, bed, standing, and bariatric scales.

\textbf{4.1. Wheelchair Scales}

The most common types of accessible scales are wheelchair scales. Wheelchair scales can be used by ALL patients, and are recommended for patients with limited stability, larger patients, and patients needing to sit on a chair while be weighed. Types of these scales include:

1. Folding Portable Wheelchair Scales (easily moved when needed)
2. Stationary
3. Platform (portable and in-ground)

\textbf{1. Folding Portable Wheelchair Scales (easily moved when needed)}

Portables scales range in the ease in which they can be moved. For example, some portable scales can be folded up and are light in weight, while others are heavier and take greater effort to move. When planning to purchase a wheelchair scale it is important to consider the safely features needed for the patient, and, that of staff, and whether portability of a scale is needed.
2. Stationary (wall-mounted and wall-hugging) Wheelchair Scales (with safety rails and non-slip surface.)

Figure 4. 1. (left above) Detecto Portable Wheelchair Scale. Weight capacity 600 lb. Platform size 34 x 32.

Figure 4 2. (middle and right above) Seca 676 Wheelchair Scale. Weight capacity 800 lb. Platform size 35 x 38.

Figure 4. 3. (left above) Scaletronix Wall Mounted Wheelchair Scale. Weight capacity 660 lb. Platform size 34 x 32.

Figure 4. 4. (right above) Detecto 6496 Wall Hugger Wheelchair Scale. Weight capacity 800 lb. Platform size 30 x 26.
3. **Platform (portable)**

Figure 4. 5. (left above) Detecto Bariatric Portable Scale. Weight capacity 800 lb. Platform size 30 x 32.

Wheelchair scales are the most common type of scale used to weigh the largest variety of patients, particularly in a clinical setting. There are other types of “specialty” scales used more commonly in hospitals to ensure providers and patients are weighed safely and accurately. These include 5.) lifting devices with built-in scales; 6.) in-bed scales; and 7.) hospital beds with built-in scales. Areas where such scales are commonly used include: intensive care, coronary care, geriatric care, surgical recovery, burn treatment, and rehabilitation. Below are samples of these three types.

5. **Lifting devices with built-in scales** 6. **In-bed scale**

Figure 4. 7. (Left above) Volaro Series 4XB Full Body Patient Lift w/Scale. Weight capacity 1,000 lb. Figure 4. 8. (Right above) IB400 Weigh mobile Electronic In-Bed Scale. Weight capacity 400 lb. Under bed clearance 4.8” (122mm) high.
7. Hospital beds with built-in scales

Figure 4. 9. (Left). Hill-Rom VersaCare® Bed. Built-in scale. Lowest height to 15.5 inches, floor to sleep surface (excluding mattress).

4. a. CHOOSING AN ACCESSIBLE WEIGHT SCALE:
Desirable features of an accessible weight scale include:

- Sturdy hand rails attached to unit, if unavailable (Figure 4. 10 below right), install grab bars on wall.

Figure 4. 11. (above left) standard stationary wheelchair scale with fixed arm rails, Figure 4. 12. (above right) wall mounted wheelchair scale without hand rails. Figure 4. 13. standard grab bars.

- High weight capacity (500-800lbs+);
- Large and easy-to-read display (digital);
- Slip resistant platform; and
- Wide platform, large enough to accommodate large power-wheelchairs.
4. b. PLACEMENT CONSIDERATIONS

![Diagram of entering and exiting requirements for wheelchair scales](image)

Figure 4.16. – All wheelchair scales require 2x the (straight-route) length of the scale for a wheelchair or scooter user to enter and exit. The scale entering route should not be blocked by obstructions, protruding objects, fire exits, or in the path of high used area or blocking frequently used room entrances.
ADDITIONAL CONSIDERATIONS:

- One accessible scale for all departments that weigh patients as part of vitals’ process.
- For departments / clinics that may not weigh patients regularly, consider sharing scale with adjoining departments.
- Train staff on proper use.
- Create, distribute and post accessible wheelchair location/s. Include platform size (standard or oversized).

STANDARD SCALE (NON-ACCESSIBLE)

- In addition to accessible wheelchair scales, consider placing grab bars or walker type devices to aid in getting on and off a step-up scale as well as providing increased stability and safety.

Figure 4. 17. – a walker place around a standard step-up scale

Refer to Tips for Weighing Patients Using an Accessible Scale page 31, for placement and use of an accessible wheelchair scale.
### 4. C. (SAMPLE) LOCATOR GUIDE: ACCESSIBLE (WHEELCHAIR) WEIGHT SCALES

<table>
<thead>
<tr>
<th>#</th>
<th>Campus</th>
<th>Department</th>
<th>Bldg./Floor</th>
<th>Qty.</th>
<th>Model</th>
<th>Platform Size</th>
<th>Weight Capacity</th>
<th>Hand Rails</th>
<th>Will accommodate all wheelchairs and scooters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Scaletronix 6702W</td>
<td>28”w X 32”d</td>
<td>880 lb.</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>Scaletronix 6202</td>
<td>24”w X 30”d</td>
<td>800 lb.</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
5. RESOURCES

5. a. MANUFACTURERS OF ACCESSIBLE EXAM TABLES, CHAIRS, AND WEIGHT SCALES

The following is a sample (non-exhaustive) list of medical equipment manufactures that produce examination tables, chairs, and weight scales with accessible features. For more information, contact the manufactures.

A. ACCESSIBLE EXAMINATION TABLES AND CHAIRS

- Chattanooga, www.chattgroup.com 1-800-494-3395
- Design Specifics LTD. www.designspecific.co.uk 1-866 305 6462
- Earthlite, www.earthlite.com 1-800-872-0560
- Hausmann, www.hausmann.com 201-767-0255
- Oakworks, www.oakworks.com 717.235.6807
- Ritter/ Midmark, www.midmark.com, 1-800-MIDMARK
- Sonesta, www.stille-sonesta.com 1-800.665.1614
- United Metal Fabricators, www.umf-exam.com 1-800-638-5322

B. ACCESSIBLE WEIGHT SCALES

- Health-o-meter, www.healthometer.com,
- SECA, www.itinscale.com

Sample of standard and over-sized wheelchair as of the date of this guidance document

- **Standard Platform**
  - Scale-Tronix 6202 (Stow-A-Weigh) Wheelchair Scale (standard platform)
  - Health-O-Meter Pro-Plus Wheelchair Scale 2500KL (standard platform)

- **Large Platform**
  - Detecto Wheelchair Scale model 6550 (portable, folding) (large platform)
  - Scale-Tronix In-Floor Medical Scale (large platform)
  - Health-O-Meter Pro-Plus Wheelchair Scale 2600KL (large platform)
  - Seca 676 (large platform)
  - Detecto Wall Hugger Wheelchair Scale 6496 (large platform)
5. b. ACCESS GUIDANCE DOCUMENTS

A. FACILITY ACCESS

- **Checklist for Readily Achievable Barrier Removal**
  
  Easy-to-use survey tool for identifying barriers in facilities. The complete checklists and worksheets are the kind of documentation that organizations should keep on file to demonstrate that they are making a good faith effort to comply with the requirements of the ADA.  
  
  [ ADA Access Checkweb website](http://www.usdoj.gov/crt/ada/checkweb.htm)

- **Access To Medical Care For Individuals With Mobility Disabilities**, July 2010. U.S. Department of Justice Civil Rights Division Disability Rights Section  
  [ ADA Medical Care website](http://www.ada.gov/medcare_mobility_ta/medcare_ta.htm)

  
  Informal presentation on ADA compliance with chapters on: program access and nondiscrimination; physical access; communication access; and employment practices. Gives steps for completing an ADA compliance plan, contains checklists, planning sheets, samples of ADA compliance plans and lists many resources available for additional information and assistance. (Compliance with the transportation provisions of ADA is not covered). 
  
  [ Kailes ADA Compliance Guide website](http://www.jik.com/adacg.html)

  Contact June Isaacson Kailes, Disability Policy Consultant  
  Email: jik@pacbell.net, [www.jik.com](http://www.jik.com)

  
  This booklet provides guidelines and recommendations to help health care professionals ensure equal use of the facility and services by all their patients. This guide gives health care providers a better understanding of how to improve both the physical environment and personal interactions with patients with disabilities. 
  
  [ Removing Barriers to Health Care website](http://www.fpg.unc.edu/~ncodh/rbar/)  
  [PDF](http://www.fpg.unc.edu/~ncodh/pdfs/rbhealthcare.pdf)

B. COMMUNICATION and CUSTOMER SERVICE ACCESS

- **Kailes, J., Language is More Than a Trivial Concern!** November 1990, Revised 1999.
  
  Sensitizes people to appropriate terminology to use when speaking with, writing about or referring to people with disabilities. Challenges readers to be aware of the importance of using disability-neutral terms. Details preferred language and gives reasons for the disability community’s preferences. Serves as an excellent reference tool for the public, media, marketers, providers and for board members, staff and volunteers of disability-related organizations. Includes a language quiz and many examples. A best seller! 
  
  [ Kailes Language website](http://www.jik.com)

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Brief: Importance of Accessible Examination Tables, Chairs, and Weight Scales

Describes practical approaches to use when serving or waiting on customers with physical, visual, hearing, cognitive, intellectual, and psychiatric disabilities, as well as people with significant allergies, asthma, multiple chemical sensitivities, and respiratory-related disabilities. Excellent training tool for people working with the public. Includes a quiz as well as language and communication tips.

[jik@pacbell.net](mailto:jik@pacbell.net),
[www.jik.com/gpam.html](http://www.jik.com/gpam.html)

Distribution is encouraged, and permission is granted provided that:

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Kailes, J., and Mac Donald, C., *Importance of Accessible Examination Tables, Chairs, and Weight Scales*, 2010. Published and distributed by the Harris Family Center for Disability and Health Policy, Western University of Health Sciences, 309 E. Second Street, Pomona, CA 91766-1854, (available at [www.hfcdihp.org/products](http://www.hfcdihp.org/products)) Email: jik@pacbell.net . Voice-909.469.5213/TTY-909.469.5520, Fax 909.469.5503.

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Edition 1 of this brief was funded, in-part, by the National Institute on Disability and Rehabilitation Research, U.S. Department of Education, under grant #H133E020729. The Rehabilitation Engineering Research Center (RERC) on Accessible Medical Instrumentation was a five-year project that evaluates methods and technologies to increase the accessibility and usability of diagnostic, therapeutic, and procedural healthcare equipment, and associated assistive technologies, for people with disabilities.
Tips for Weighing Patients Using an Accessible Scale

10.4.10

Who should use an accessible weight scale?

Patients who...
- Have difficulty standing or maintaining balance on a standard scale platform.
- Have difficulty or are unable to step onto a standard scale.
- Weight is higher than the standard scale's limit.

How to weigh wheelchair users:

All wheelchair scales require 2x the (straight-route) length of the scale for a wheelchair or scooter user to enter and exit. The scale entrance route should not be blocked by obstructions, protruding objects, or fire exits. The route should also be away from high foot traffic areas and should not block frequently used room entrances.

1. Sloped surface provides access to scale platform -- no abrupt level changes at floor or platform.
2. Edge protection at drop off.
3. Large platform to accommodate various wheelchair sizes.
4. Provide maneuvering space to pull onto and off scale.

1 Access to Medical Care for Individuals with Mobility Disabilities, U.S. Department of Justice, Civil Rights Division, May 2010
1. Remove excess weight from the wheelchair, such as book bags, backpacks, etc.

2. Have the patient roll their wheelchair onto the scale and lock the brakes for safety.

3. Weigh patient and wheelchair together.

4. Have the patient roll off the scale and then help the patient transfer to a safe location, e.g., chair, hospital bed or exam table.
   a. Use lifting equipment and/or a one or two-person team, depending on need, to transfer the patient from their wheelchair to a safe location.
   b. During transfer, carefully monitor the patient and provide for balance and support as needed.
   c. If the safe location is in a separate room from the scale, do not leave the patient alone.

5. Roll the empty wheelchair back onto the scale and weigh. Then, document weight in the patient’s chart for future use. (NOTE: There is no standard weight for a wheelchair)

6. Subtract the weight of the empty wheelchair from the combined weight of the patient and wheelchair to obtain the patient’s weight.

7. Document the patient's weight in their chart.

8. After the exam, assist the patient in transferring back into their wheelchair.

   *On every visit, ask the patient if they have the same wheelchair – that way you do not need to weigh it every time. However, you will still need to weigh the patient in their wheelchair at every visit, as you would for all patients.

Weighing patients with limited mobility and/or who have difficulty maintaining their balance on a standard scale:

1. Place a chair (preferably an armchair) on the scale and document its weight.

2. Have the patient sit on the chair.

3. Weigh the patient and chair together.

4. Provide assistance to patient throughout weight measurement procedure. Carefully monitor the patient and watch for any balance support that may be needed. Subtract the chair's weight from the combined weight of the chair and patient to get the patient’s weight.

   Remember, anyone and everyone can use an accessible scale! It is accessible to all your patients!
Brief: Importance of Accessible Examination Tables, Chairs, and Weight Scales

Center for Disabilities Issues and the Health Professions
A. **Number of Accessible Exam Rooms with Exam Tables / Chairs**

- All clinics and / or departments should have a minimum of one accessible exam, procedural and/or treatment room that contain one “accessible” exam table/chairs lowering to at least 19 inches or less from floor to top of the cushion.

- In departments with more than one examination room, accessible tables or treatment chairs should be placed in no less than 10% of rooms, and up to 50%. Higher percentage equipment standards should be applied in those clinics / departments serving patients that have mobility limitations due to arthritis, stroke, orthopedic conditions, late term pregnancy, neurological conditions and general weakness.

B. **Choosing Exam Rooms for Placement of Accessible Equipment**

   Closest to:
   - Wheelchair accessible weight scale,
   - Wheelchair accessible restroom,
   - Clinical administrative area,
   - Shared physicians’ room (not dedicated to 1 physician / clinician), and
   - Adequate wheelchair or scooter “turning radius” (below).

![T-Shaped Space for 180 Degree Turns](image)

![Space 60 in. Diameter](image)
Exam room showing clear floor space for turning a wheelchair. Space also can accommodate a portable patient lift.¹

C. **Other Considerations** (Figure above)

1. Clear floor space, 30” X 48” min., next to exam table to make it possible to do a side transfer.
2. Adjustable height accessible exam table lowers for transfers.
3. Providing space between table and wall allows staff to assist with patient transfers and positioning. When additional space is provided, transfers may be made from both sides.
4. Amount of floor space needed beside and at end of exam table varies depending on method of patient transfer and lift equipment size.
5. Accessible route connects to other accessible public and common use spaces.
6. Accessible entry door has 32” minimum clear opening width. Door swings open at least 90 degrees.
7. Maneuvering clearances are needed at the door to the room.

Note: Additional clear floor space can be provided by relocating chairs, trash cans, and other items.

D. **Lift and transfer Assistance**

Some people will need additional assistance to get on and off an exam table, even if it lowers to 17-19 inches from the floor. The kind of assistance needed will depend on the patient’s disability.

Some people will need only a steady hand from a staff person. Other people will need items such as a transfer board (a product made of a smooth rigid material which acts as a supporting bridge between a wheelchair and another surface, along which individual slides) or sheet; (Figure below)³ Still others will need assistance through use of a lifting device.

**Assisted transfer using a transfer board and gait belt with handles**

1. Gait belt with handles assists with guiding along transfer board
2. Transfer or sliding board acts as a bridge between wheelchair seat and table surface
Assisted Transfer Utilizing a Portable Floor Lift

Low height, adjustable width base permits the lift to be positioned at the end of the examination table

✔ **Always** ask person the type of assistance needed. May include, but not limited to:
- Complete lifting
- Providing extra balance & stability
- Help with stabilizing medical equipment e.g. wheelchair, cane and walkers
- **Never** ... leave person un-attended, after transfer has been complete.

**E. GOOD PRACTICES:** All staff should know which rooms have accessible medical equipment and should be trained on the use of the equipment. When scheduling or assigning an exam room, inquire if the patient would benefit from the use of an accessible exam table / chair, lifting assistance, and exam room. If yes,
- Document in patient record
- When setting appointments allow more time for the patient’s visit
- Schedule appointments when there is sufficient staff assistance available for lifting and/or transferring assistance.

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1. Access to Medical Care for Individuals with Mobility Disabilities, May 2010, US Department of Justice, Civil Rights Division, Disability Rights Section
2. Ibid. 3. Ibid.
ENDNOTES


ix Ibid.


xii Ibid.

xiii Ibid.

xiv Ibid.


xviii Ibid.

xix Settlement agreement between the United States of America and Georgetown University, under the Americans with Disabilities Act, Department of Justice complaint number 204-16-92; L. Einstein, Department of Justice staff attorney. Telephone conversation with author. 28 Jul 2003. www.usdoj.gov/crt/ada/gtownhos.htm#anchor262953.

xx Settlement agreement between the Unites States of American and Dr. Robila Ashfaq, under the Americans with Disabilities Act, Department of Justice complaint number DJ# 202-12C-264, OCR# 04-].

xxi Settlement agreement between the United States of American and Washington Hospital Center under the Americans with Disabilities Act, Department of Justice complaint number 202-16-120. www.ada.gov/whc.htm.

xxii Settlement agreement between the United States of American and The Beth Israel Deaconess Medical Center under the Americans with Disabilities Act, Department of Justice complaint number # 202-36-19 www.ada.gov/bidmsa.htm.

xxiii Structured negotiation for Partners HealthCare, 2008


xxvi Title II applies to all public entities, defined as “any state or local government. 42 U.S.C. §12131 (2002). Section 504 applies to any entity that receives federal funding. 29 U.S.C. § 794. Federal financial assistance can be direct or indirect. Jacobson v. Delta Airlines, Inc., 742 F.2d 1202, 1211 (9th Cir. 1984).

xxvii Ibid.

xxviii Ibid.
Weight Control and Diet, December 2001, Reuters Health (RH)


Ibid.
