

Pacific ADA Center
Healthcare and the ADA Webinar
Thursday, March 26, 2020
2:10-4:00 p.m. ET

>> LEWIS KRAUS: Welcome to the Health Care and the ADA: Including People With Disabilities Webinar Series. I'm Lewis Kraus from the Pacific ADA Center, your moderator for this series.

This series of webinars is brought to you by the Pacific ADA Center on behalf of the ADA National Network.

the ADA National Network is made up of ten regional centers that are federally funded to provide training, technical assistance and other information as needed on the Americans with Disabilities Act

You can reach your regional ADA Center by dialing 1-800-949-4232.

As always in our sessions, only the speakers will have audio. Realtime captioning is provided for this webinar.

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This Webinar Series is intended to...

Oh, sorry. The audio is being broadcast through your computer. Make sure your speakers are turned on and your headphones are plugged in.

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Thank you for spending your time today with us and talking about something different than what we always have been talking about, what we've been talking about recently.

This Webinar Series is intended to share issues and promising practices in healthcare and accessibility for people with disabilities.

The series... oh, sorry, even more listening.

If you don't have sound capabilities on your computer and prefer to listen by phone, dial 1-669-900-9128, and use the webinar ID of 760-897-977.

And note that this webinar is being recorded and can be accessed on the ADAPresentations.org website in the archives section next week.

Now, as I was saying, this Webinar Series is intended to share issues and promising practices in healthcare accessibility for people with disabilities.

The series topics cover physical accessibility, effective communication, and reasonable modification of policy issues under the Americans with Disabilities Act of 1990, the ADA.

Coming sessions are available at ADAPresentations.org under the schedule tab.

Then follow to healthcare.

These monthly webinars occur on the fourth Thursday of the month at 2:30 eastern, 1:30 central, 12:30 mountain and 11:30 Pacific time. By being here you are on the list to receive notices for future webinar in the series.

Those notices go out two weeks before the next webinar and open to registration.

You can follow along on the webinar platform with the slides. If not using the webinar platform you can download a copy of today's PowerPoint presentation at the healthcare schedule web page of ADAPresentations.org.

At the conclusion of today's presentation, there will be an opportunity for everyone to ask questions. You may submit your questions using the chat area within the webinar platform.

And the speakers and I will address them at the end of the session. So feel free to submit them as they come to your mind during the presentation.

Type and submit your questions in the chat area text box or press alt-H and enter text into the chat area.

If you're listening by phone and not logged in to the webinar, you may ask questions by emailing them to ADAtech@ADAPacific.org.

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You can email us at ADAtech@ADAPacific.org.

Or you can call us at 510-285-5600.

Today's ADA National Network learning session is titled "Accessible Medical Diagnostic Equipment and Prescription Drug Container Labels."

The Access Board, under the Patient Protection and Affordable Care Act has issued accessibility standards for medical diagnostic equipment.

These standards provide design criteria for examination tables and chairs, including those used for dental or optical exams and procedures, wait scales, radiological equipment, mammography equipment, and other equipment used for diagnostic purposes by health professionals.

Additionally our presenters will cover the advisory guidelines for making information on prescription drug container labels accessible to people who are blind or visually impaired or who are elderly.

Today's speakers are from the U.S. Access Board. The U.S. Access Board is an independent federal agency that develops and maintains accessibility guidelines and standards for the built environment, transportation vehicles, telecommunications equipment and information technology under the Americans with Disabilities Act and other laws.

Randall Duchesneau is an accessibility specialist at the U.S. Access Board with a focus on residential housing, transient lodging and healthcare.

Bobby Stinnette serves as accessibility specialist at the U.S. Access Board.

I will now turn it over to you, Randall and Bobby.

>> Randall Duchesneau: Thank you very much.

Welcome and thank you for joining us today on our webinar on "Accessible Medical Diagnostic Equipment and Prescription Drug Container Labels."

I'll begin today's presentation with an overview of our agenda. We'll begin by discussing medical diagnostic equipment with a brief background on the standards and how and why do they originate.

We'll go through each of the three chapters of the MDE standards beginning with application, moving on to scoping, and finally the technical requirements where the bulk of this presentation will lie.

After concluding our MDE presentation, we will continue with guidance for prescription drug container labels.

This slide has a picture of an MRI machine.

The first section pertains to medical diagnostic equipment.

We'll begin with background information.

Prior to the MDE accessibility standards, there were limited existing standards on accessible medical devices.

We had the ADA and ABA accessibility guidelines, but these do not specifically address medical devices.

There was also the American national standards institute and association for the advancement of medical instrumentation HE75, which focuses on human factors engineering of medical devices, as well as other reports and research data such as the 2005 study from the rehabilitation engineering research center which looked at accessible medical instrumentation. The RERC study showed that access to various medical diagnostic equipment is challenging for people with disabilities.

The accessible medical instrumentation survey is a national study about the types of medical equipment that are most difficult for patients with disabilities to use and the causes for such difficulties.

The survey results revealed that exam tables, radiological equipment, weight scales, and exam chairs were the four most reported categories of inaccessible medical equipment with over 50% of users reporting the equipment was moderately difficult, extremely difficult, or impossible to use.

This led to the Affordable Care Act amending the Rehabilitation Act to address access to medical diagnostic equipment.

This slide contains a photo of President Obama signing the ACA into law on March 23rd, 2010.

The ACA included amendments to the Rehabilitation Act of 1973, specifically the creation of section 510 which mandated the Access Board issue minimum technical criteria for accessible medical diagnostic equipment in consultation with the commissioner of the Food and Drug Administration. The standards must ensure that equipment used in physicians' offices, clinics, emergency rooms, hospitals and other medical settings are usable by individuals with accessibility needs and must allow independent entry to use of and exit from the equipment to the maximum extent possible.

Scoping or who must comply when compliance is required, and the minimum number required to comply is to be determined in the appropriate regulatory or administrative context.

In other words, through rulemaking when another federal agency chooses to adopt the MDE standards.

The MDE standards are finalized by the U.S. Access Board, but they remain voluntary until adopted by an enforcing agency like the Department of Justice under the Americans with Disabilities Act or other potential agencies like health and human services. They can also be used by the Food and Drug Administration to verify labeling claims, equipment is accessible and can be voluntarily adopted through policy like the VA has done for procurement in some of their locations.

We would like to thank some of our federal partners that helped us establish these standards, including the Department of Health and Human Services, specifically the U.S. Food and Drug Administration, as well as the Department of Justice, Disability Rights Section, and the Department of Veterans Affairs. Their logos are pictured on this slide. The standards for accessible diagnostic equipment was published in the Code of Federal Regulations under title 36 section 119 5.1 which refers to the appendix.

The standards can also be found on our website via the link before www.Access-Board.gov .

The standards are grouped into three chapters similar to the ADA. We begin with application and administration, then scoping, and the technical requirements where the bulk of this presentation is going to cover. The technical requirements are separated by patient position during use of diagnostic equipment. Additional technical requirements for supports, communication and operable parts are provided towards the end.

We will go through the standards pretty much in order of how they were written except we will delve into more detail on supports earlier on and group exceptions for certain types of equipment together.

The MDE standards do not address the accessibility of existing diagnostic equipment. Nor do they require a certain percentage of new or replacement equipment to be accessible.

The mandate in section 510 specifically required technical criteria. This slide is accompanied by a picture of an operating room with various medical equipment. Now we'll start with Chapter 1, application and administration.

The purpose of the MDE standards is ensure accessibility to and usability of the diagnostic equipment by patients with disabilities. The standards are designed to provide for independent access and use of diagnostic equipment to the maximum extent possible.

As mentioned previously the standards only apply to new diagnostic equipment and based on the patient positions that the equipment supports during patient transfer and diagnostic use.

Requirements for communication features or operable parts are only applicable where provided for patient use. Communication features and probably parts used only by employees operating the diagnostic equipment are not addressed by the MDE standards.

Section 510 specifically requires the following medical diagnostic equipment to be covered.

Examination tables, examination chairs, including eye exam and dental exam, weight scales, mammography equipment, x-ray machines and other radiological equipment.

Also, per the definitions in Chapter 1, medical diagnostic equipment is defined as equipment used in or in conjunction with medical settings by healthcare providers for diagnostic purposes.

Some examples of medical diagnostic equipment are pictured here, including a photo of a wheelchair user transferring on to an examination chair.

Wheelchair users next to an MRI examination table.

A roll on wheelchair accessible weight scale.

And a wheelchair user during an eye exam who is seated in their wheelchair with equipment on an adjustable table that provides knee and toe clearance.

Medical diagnostic equipment does not include personal devices such as blood glucose monitors, position aids, such as wedges, or surgical and medical instruments such as stethoscopes, forceps, scalpels, etc.

Chapter 1 includes a statement on equivalent facilitation. However, the language is different than that of the 2010 EDA. The language is stated in affirmative. The use of alternative designs or technologies that result in substantial equivalent or greater accessibility and usability specified in the MDE standards is permitted.

Measurements and dimensions are based on adult anthropometric. The use of medical diagnostic equipment by children is not addressed in the standards but may be in the future.

Similar to the ADA dimension is not stated a maximum or minimum or absolute. Dimensions are subject to conventional industry tolerances for manufacturing processes, material properties, and field conditions.

Measurements are stated in U.S. customary and metric units. The value stated in each system may not be exact equivalents and each system shall be used independently of the other.

If you use millimeters all dimensions use millimeters. If you use -- all dimensions should comply with dimensional requirements in inches.

Chapter 1 includes a list of defined terms. Which are helpful in determining which equipment and what components of equipment are covered by the standards.

The list of defined terms includes the list you see here, which is everything from in transfer surfaces to operable parts, imaging beds, transfer surfaces.

Terms not defined in section M102.1 and not defined in regulation or policy issued by the enforcement authority use meanings in the sense that the context implies.

Please see the text of the MDE standards for definitions to these specific terms.

Now we are going to move on to Chapter 2: Scoping.

M201 states that scoping is to be determined by enforcing authority. As mentioned previously potential enforcing authorities could include Department of Justice, Department of Health and Human Services or adoption through policy like some Veterans Administration hospitals have done.

Currently Department of Justice or HHS have not adopted MDE standards. There is also a general exception in M201.2.

Medical diagnostic equipment is not required to comply with one or more of the applicable requirements in the MDE standards in the rare circumstances where compliance would alter diagnostically required structural or operational characteristics of the equipment and would prevent the use of the equipment for its intended diagnostic purpose.

Even with this general exception, diagnostic equipment shall comply to the maximum extent practicable.

Moving on to Chapter 3: Technical requirements.

There are seven sections in Chapter 3 which can be divided into two parts. The first four sections are devised based on the position the patient is in during use of the diagnostic equipment.

M301 diagnostic equipment used by patients in supine, prone or side-lying positions. Supine means lying on your back and prone means lying on your stomach.

This is illustrated by a patient lying on their back on an examination table with a healthcare worker standing beside the patient.

M302 covers seated positions. This is illustrated by a wheelchair user who has transferred out of their wheelchair and on to an examination chair.

M303 addresses equipment that is used while a patient can remain seated in their wheelchair.

This is illustrated by a woman seated in her wheelchair pulled up to a mammography equipment with knee and toe clearance.

M304 covers standing positions, which is illustrated by a person standing on a weight scale holding on to horizontal supports.

Each of these patient positions will be discussed first, then we will go into further details on supports, communication and on rabble parts.

We begin with M301, diagnostic equipment used by patients in supine, prone or side-lying positions, indicated on this slide by an illustration highlighted in blue of a patient laying on their back on an examination table and being attended to by a healthcare worker. First, what are some types of medical diagnostic equipment that are used in the supine, prone or side-lying positions?

The type of equipment covered under the section includes MRI, CT scan, examination tables and hospital stretchers.

It does not include examination chairs that recline. Those are covered under section M302.

Section M301 is broken into the following subsections. We first begin by identifying technical requirements of a transfer surface, including height adjustability, minimum size compliant with M transfer or side transfer and unobstructed transfer surface.

Also requirements for support include transfer supports, leg supports where stirrups are provided and head and back support if used in a reclined position.

Equipment should also be lift compatibility which includes clearance end base or clearance around base.

There is also an exception to using overhead lifts in certain circumstances. The transfer surface should be height adjustable. You measure the height from the floor to the top of the uncompressed transfer surface.

Often medical equipment may have padding or material on the examination surface that can be compressed. Measurements should be to the top of the uncompressed surface.

The transfer surface must be adjustable in height to reach a high transfer position of at least 25 inches.

The transfer surface must reach low position of no higher than 17 to 19-inch maximum.

This low transfer position is stated as a range and will be discussed further on the next slide.

In addition there must be at least four additional transfer positions located between high and low positions separated by one inch minimum.

Equipment that is continuously adjustable throughout the high and low range is ideal but it is not required.

Fixed transfer positions that the equipment can be adjusted to would meet the minimum requirements so long as the positions are separated by one inch minimum.

For example, you can have an examination table that can be adjusted to the following increments.

26 inches, 24.5 inches, 23, 21.5, 20 and 18.5 inches.

This has a high transfer surface at 26 inches, which is above the 25-inch minimum. Has a lower position at 18.5 inches, which is in the range of 17 to 19, and has four additional transfer positions that are separated by at least an inch and are between the high and low. These are at 24.5, 23, 21.5 and 20.

But, of course a much simpler solution is for the equipment to be continuously adjustable from a low of 17 to 19 to a high of at least 25.

The low position is set as a range between 17 inches to 19 inches because consensus could not be achieved on how low the equipment needed to go.

This provision has a sunset clause which will expire January 9th, 2022.

Additional research is to be done on transfer heights to determine how low a transfer position needs to get and if it adversely affects individuals with disabilities if the low position is at 19 inches.

There are two types of transfer services. End transfer surfaces and side transfer surfaces. An end transfer surface is defined as a transfer surface located at one end of the examination surface that allows patient transfer at the end and one additional joining side of the examination surface.

The diagram labeled end transfer surface shows arrows indicating the transfer direction. One area is located at the end or foot of the examination table, and the other arrow indicates a transfer direction coming from the side that additional joins the end.

In this case it's the left side.

It could also be the right side.

A side transfer surface is defined as a transfer surface located within the length of the examination surface that allows patient transfer on two opposing sides of the examination surface. The diagram labeled

side transfer surface shows arrows indicating the transfer direction on both the left and right side of the examination table.

Depending on the type of equipment and how it is best used, one transfer type may be preferred over the other.

Transfer surface needs to be minimum size that complies with end or side transfer.

Often equipment has rounded corners or tapered edges which would be difficult to measure. Measuring from the center line of the surface area simplifies compliance.

An end transfer surface must be at least 28 inches wide and 17 inches long.

A side transfer surface must be at least 28 inches wide and 28 inches long.

The side transfer surface location can be anywhere within the length of the examination surface that allows patient transfer on two opposing sides.

It doesn't need to be towards the top or bottom as long as there's any location within the surface area.

There is an exception to the size of the transfer surface for imaging equipment with bores. A bore is a hollow part inside a tube.

An example of this type of equipment would be an MRI machine. An MRI machine looks like a giant doughnut standing vertically.

The MRI examination bed slides through the bore or doughnut hole where it is surrounded by magnets and diagnostic equipment.

In this case the width can be as narrow as 21 inches minimum but no less than the full width of the examination surface provided.

The transfer surface should provide for unobstructed transfer on at least two sides. Side transfer this would be left and right side. End transfer this would be the end. In either the left or right side.

There are some permitted obstructions. Obstructions are permitted to extend on the transfer side beyond the transfer surfaces provided they do not protrude above the top of the transfer surface and are less than three inches deep.

This essentially allows equipment or other obstructions to protrude beyond the transfer surface creating a gap up to three inches that the patient needs to transfer over. Transferring over a gap of this size is consistent with existing research and requirements in the ADA standards.

Temporary obstructions are also allowed provided they can be repositioned during transfer. Some types of temporary obstructions you may come across would be supports and railings that can be raised or lowered.

We now will move on to the next subsection of supine, prone or sideline, which are the requirements for transfer supports to be provided at transfer services.

Transfer supports will be discussed briefly here and later on in the presentation.

Supports include transfer supports which are required for transfer surfaces, leg supports, required where stirrups are provided and head and back support where diagnostic equipment is used in a reclining position.

Transfer supports need to be provided at specific locations along transfer surfaces. For end transfers, the transfer support should be provided on the short side of the transfer surface opposite the transfer side. It is allowable to have maximum gap of one and a half inches between transfer surface and support which is measured horizontally from the nearest edge.

Side transfer of surfaces should have transfer supports on the opposite side of the transfer side and end supports should be removable to prevent unobstructed transfer from both transfer sides.

So you can see on the side transfer diagram how there are supports on both sides, so when you're transferring from one side, the opposite side has support up.

If you transfer from the right side you have support on the right side down and support on the left side up.

Transfer supports also have minimum lengths. End transfer supports must be at least 15 inches long minimum with at least 13 and a half inch along depth of the transfer surface. Side transfer surfaces must be 28 inches long minimum and removable to permit unobstructed transfer from both sides.

When the transfer supports are in use, the tops of the gripping surface must be between six inches minimum and 19 inches maximum.

Additional technical requirements for the gripping surface will be discussed later.

The transfer supports do not need to be horizontal. This diagram shows a transfer support that is on an incline. Portions of the support are 6 inches, other portions closer to 19 inches, and some sections are curved, inclined or vertical.

If you recall, we had mentioned the maximum gap between the transfer surface and the transfer support as 1.5 inches.

There is an exception that allows the gap to be 3 inches maximum for supports that fold, collapse or articulate.

Such as the ones pictured on this hospital stretcher that swing away and fold down.

For side transfer surfaces that are part of an articulating surface, transfer supports are given an exception to the length and are permitted to be 15 inches long minimum.

You may come across this situation with an examination table or stretcher that can raise and lower the head portion.

Due to its articulating nature, transfer supports placed on the articulating portion of the surface could conflict with the rest of the examination surface when the head area is raised.

There is also an exception for wide imaging exam surfaces. On very large and wide exam surfaces, where the width of the imaging bed is greater than 24 inches,

The transfer supports can be 12 inches long minimum and tops of gripping surfaces can be between 3 inches minimum and 6 inches maximum above the top of the transfer surface.

This is because on surfaces this large, the transfer support opposite the transfer side may be more difficult to reach and possibly not used by the individual transferring on to the surface.

It would be akin to transferring on to a bed or physical therapy mat, where the patient or person with the disability would place their hand on the mat itself instead of reaching all the way over the wide exam surface to a railing or support.

Another requirement is that equipment used in a supine, prone or side-lying position be compatible with portable patient lifts.

While the lift itself is not covered by the MDE standards, the equipment it is used on is covered and we wanted to ensure they would be compatible.

The illustration on the left shows two healthcare workers operating a portable patient lift that lifts a patient out of their wheelchair using a sling.

The portable patient lift looks like a crane with long legs, extending horizontally to maintain balance and control the center of gravity when the patient is in the air.

The legs of the lift are going under the hospital stretcher, so that the patient can be positioned and lowered on to the center of the hospital stretcher.

The illustration on the right is similar except the legs of the portable patient lift are spread wide open and going around the base of an examination table.

Now that you have seen how a portable patient lift interacts with tables and surfaces, we will talk about the technical requirements for lift compatibility.

Clearance in base allows the legs of the portable patient lift to go under the equipment.

Clearance must be 6 inches high minimum. Clearance must be 36 inches deep minimum or extend the full depth of the equipment.

Clearance depth is measured from the edge of the examination surface. Clearance must be 39 inches wide minimum but up to 8 inches on both side of the center line or total of 16 inches can be

obscured by equipment. This is because the patient lift leg can go around the obstruction and still fit under the base.

The patient lift legs can also be widened in a V shape to fit around wide objects. Clearance around the base also requires vertical clearance of at least 6 inches and depth of at least 36 inches,

however, the front of the equipment is permitted 26 inches wide minimum, but the clearance must increase at a rate of 1 inch in width for each 3 inches in depth.

This would permit the patient lift leg be widened and fit around the base of the equipment.

There is an exception for overhead lifts. The image to the right shows a ceiling mounted overhead lift which can pick a patient up out of their wheelchair, raise them, and then slide along

the track in the ceiling and then lower them on to the examination surface. In this case, an MRI machine.

However, not all healthcare facilities have overhead lifts and they can only be used where they have been permanently installed.

Because of these limitations, the use of overhead lifts is accepted only when the enforcing authority permits the use of an overhead lift, and the equipment is clearly labeled as not compatible with portable floor lifts.

Now that we concluded the technical requirements for equipment used in the supine, prone, or side-lying positions, we will move on to equipment used in a seated position under M302.

Most of the technical requirements are the same or are similar to that of M301. The most notable differences are in the size and add joining size requirements.

The height of the transfer surface is the same as M301. The height should be adjustable with the low transfer position between 17 to 19 inches maximum and the high position of 25 inches minimum

with at least four additional transfer positions separated by one inch minimum.

The transfer surfaces are slightly different. The requirements for M302 say that options to transfer from a mobility device shall be provided on two add joining sides of transfer surfaces.

The diagram to the left indicates this by showing transfer options at the end and side of the examination chair.

However, there is an exception for chairs with fixed footrests.

These are allowed to have transfer options on opposite sides because the fixed footrest would obscure transfer from the end.

The transfer surface size is also permitted to be a little smaller. Transfer surfaces are measured from the central lines just like M301, but they are permitted to be 21 inches wide minimum and 17 inches deep minimum.

The advantage of measuring from central lines is further illustrated in this diagram as you can clearly see the examination chair is tapered with the rear much narrower than the front.

Also, when measuring the depth of the transfer surface, you include the seating area but not the unsupported elevating feet rests or leg supports that examination chairs may have.

Also, when measuring the low height you measure from the floor to the highest portion of the designated transfer surface.

The requirements for supports are the same as an M301 and require transfer supports at transfer surfaces, leg supports where stirrups are provided and head and back support where diagnostic equipment is used in reclined position.

The equipment should also be compatible with portable patient lifts and has the same technical criteria as M301 for examination chairs. This illustration shows a patient being lifted out of their wheelchair and placed into the examination chair with the lift legs going around the base of the examination chair.

Now that I concluded my portion of the presentation, I'd like to turn it over to Bobby, who will begin with Chapter 3, section M303: Seated in a wheelchair.

>> Bobby Stinnette: Thank you, Randall. We began the webinar looking at the positioning in the supine, prone and side-lying positions and continued with section M302 in the seated position.

Now we're going to move forward with the requirements if you remain seated in a wheelchair for examinations.

What you will find in M303 of the MDE standards.

So on this slide highlighted in blue you'll see an image of a patient in a wheelchair rolled up under imaging device, and so we are talking about remaining seated in the wheelchair.

In this section we will go over wheelchair space in terms of orientation, width and depth we'll also talk about weight scales and entry points on various surfaces.

We will discuss exceptions for certain equipment, and then finally talk about adjustments for certain components like breast platforms.

Now, we're going to turn our attention to equipment used when you actually remain seated in a wheelchair.

So this is equipment where before we were talking about sitting on the equipment or transferring. Now we're talking about remaining in the wheelchair.

And this part of the standard, section M303 addresses the requirements when you remain seated in the wheelchair.

Now, the image on this slide, you have a woman using a wheelchair pulled up underneath an eye examination equipment and remaining in the wheelchair for the examination.

In this exam, the equipment can simply be pushed out of the way and the patient can wheel up to the equipment.

In that case, this would be the type of equipment that M303 would apply to.

Also, as shown in the image, the orientation is designed so that a patient seated in a wheelchair orients in same direction that a patient not seated in a wheelchair orients when the medical diagnostic equipment is in use.

Now, the fundamental requirements in this part of the standard is for what we call wheelchair space.

Now, all wheelchair space have to be at least 36 inches wide, but the manner of entry to the space will change its depth or length.

So we have one where you enter the space from the front or rear, and we also have a length requirement where you enter from the side.

And a depth requirement where you can pass through from one end of the wheelchair space to the other.

Now, here on the slide, we have an example of a 36-inch wide and 48-inch deep space where you can enter from the front or rear.

You basically enter from a point and exit from that point.

And then you have the side space where you have a depth of 60 inches minimum.

Also, when you have a pass-through, then you need to have 40 inches minimum space.

And we will talk about pass-through weight scales a little later on.

So, what we did is we looked at the ADA and the ABA standards for accessible design. And we looked at maneuvering clearances for alcoves.

And we applied that in the standard. You can find that in the ADA section 305.7.

Now, I want to make this clear that we're talking about spaces where you are remaining seated in your wheelchair.

We're not talking about providing space for wheelchairs when you will be transferring from your device on to the chair.

We don't address clear floor space necessary for transfer in the MDE standard. We are just talking about remaining in the wheelchair.

Okay. Now in terms of maneuvering in wheelchair space, there is one type of equipment that runs counter to most of the others. And that is portable weight scales.

Which is usually on a raised platform. Now, in this picture on the slide, we have a patient on a scale platform.

Now, these weight scales are typically small and move, and one kind of interesting thing about them is that when you're on them, the footrest of the wheelchair and portions of the wheel, arms, toes, etc.

can extend out from the platform and they can overhang. In fact, maneuvering is less restrictive if you think in terms of the typical alcove in a building.

It's kind of the opposite situation here in a raised platform. You might have more flexibility than if you were in some other situation.

Now, we addressed this type of equipment and we've done it in a couple of different ways. First off, you have up in the right-hand corner an image of a pass-through wheelchair space that I mentioned earlier, and it still had the 36-inch wide space, but it's a minimum depth of 40 inches. So when you can pass through from the front to the end, you can make this space shorter.

Which is often the case with these small portable platforms. We also have an exception for the width of wheelchair spaces on raised platforms.

Now, the pass-through depth I talked about earlier, that applies to any situation or equipment raised or not.

The exception for a raised platform is equipment when you are raised up and have wheelchair space. And basically if there is no obstruction higher than 4 inches above the 36-inch clearance

you can reduce that to 32 inches minimum. So, you have this area, which is about 4 inches high and 2 inches wide where you can obstruct it.

So, for example, we have a requirement for edge protection of at least two inches high that must be provided on the raised platforms that are higher than 1.5 inches.

So you can put your edge protection in that area.

So now let's look at the image here on the lower right-hand corner. We have an elevational view, which kind of puts together how these requirements will be helpful in a weight scale situation.

So you can see the diagram of the person and wheels and toes detected beyond the 40 inches minimum with really little impact on the usability of the equipment.

So when you have a wheelchair space that requires a level change to get to, you have what is called a ramped entry.

And you can address this in a number of ways.

So if it's a small change in level, a half-inch or less, then you address it very much like you would thresholds in the ADA standards.

You would have a vertical core inch maximum permissible and after that point you can go to a beveled with a slope of 1 to 2.

Now, above a half-inch you would be required to apply the requirements for ramps in a very similar manner as the ADA standards do.

And you would be required again if you had to have a ramp, a maximum slope of 1-12.

Now, we do have an exception, though, for ramps. Up to 2.5 inches, they can be steeper. It can be 1 and H slope.

Now, this is consistent with the ADA standards exception for alterations that permit you to use steeper slopes, and the analysis is that this was acceptable in the case where these weight scales with kind of very short platform heights.

But the 1 in 8 is the steepest you would ever want to go. Otherwise you could have something happen, like this image shown here in the upper left-hand corner of the slide.

A combination of a platform height and the steep slope will cause your food rest to jam and you would never get your wheels up on to the slope.

So we talked about the wheelchair space. The next important thing is the fact that you may have to deal with knee and toe space for clearances.

So where wheelchair spaces are entered from the rear and includes a space beneath components, the knee and toe clearances that is essentially the same as they are in the ADA and the ABA standards must be provided.

So you will be provided a knee space that is very much like you would have in an accessible, like, laboratory or work. And here on the slide we have an image of a woman that is pulled up to eye examination equipment.

And this would probably result in a knee space that is similar to what I mentioned earlier, like an accessible laboratory or work surface.

Now, on the right-hand side is a diagram of the requirements in detail. Now, one of the takeaways from this slide is that most equipment knee and toe space would be essentially the same as it is in the ADA standards.

Now, there is an important deviation from this, and that is equipment with breast platforms or mammography equipment. And this addressed differently because of the nature of its use.

It requires pulling up to the machine to a chest point in a way that is certainly not like using a countertop.

It is a different dynamic, therefore we have increased the depth of the knee and toe clearance, both at the top and bottom, to permit you to really jam yourself up against the surface.

Now, for the breast platform itself, we do not have a requirement that it be adjustable, or adjustable height, from 24 inches to 42 inches minimum above the floor.

You have to at least have it adjusted in that minimum range.

Now, another unique concern about this equipment when we talk about mammography equipment, it has very cantilevered entries from the breast platform. This, of course, can cause a tipping forward issue for the user.

So as a result a lot of equipment is designed to have a flange to come out at the base and kind of counteract this motion.

Additionally, technicians and other healthcare professionals, any access to the read outs and controls at the base of some of these types of equipment. So for these reasons we permit an area in the knee and toe clearance where components can extend into its profiles, no higher than an inch and a half, with a little bit of taper at the back.

Now, usually we don't allow anything to violate knee and toe clearance at all. But in this case, because of the deeper nature of the knee clearance and the data we received on footrests, it was determined that this would be permitted.

So, we talked about positioning in the supine, prone, and side-lying position. Also the seated position, where you can transfer on to a surface and then we just talked about requirements when you remain seated in the wheelchair.

So now the focus really has been generally about people using mobility devices. And now we have come to our final equipment category, which is standing position.

Now, standing position is a little different. It is intended for people who ambulate with the mobility disability or otherwise have a balance or steadiness concern while they're standing.

But the requirements are pretty straightforward. You have to have a slip resistant surface and provide standing supports to each side of the surface.

These supports can be horizontal or vertical.

You have a choice. You can do vertical supports, and it's required to a minimum of 18 inches long and be mounted 34 to 37 inches maximum above the floor to the lowest end of the gripping surface.

Now, your other choice is to do a horizontal support. Now, the horizontal support only needs to be a minimum of 4 inches long. And it has to be 34 to 38 inches above the standing surface.

Now, these requirements reflect human factors data concerning handrail requirements. Now, there are not a lot of other requirements for standing supports as they are for transfers.

And the rationale behind this is that these standards are intended to apply to a wide range of different types of equipment and the different actions intended within them.

Now, the standards do address equipment serving both standing users and those using a wheelchair at the same time.

This image here on the slide is oriented towards a weight scale, but it could apply to any other equipment.

Now, you have -- you're not required to provide equipment that serves both people who stand and that those that use a wheelchair at the same time.

This is if you do provide that, then you need to comply with the standards to implement these changes of how horizontal supports will be provided.

And, again, as we mentioned earlier, we don't have any scoping for the standard until it's adopted by an enforcement agency. So we're not saying you have to do this for weight scales,

as this is optional, but if you do it and have standing supports on the surface, that also has wheelchair space, and it's a rear or front entry, meaning it's a space that connects it from the same point,
then your transfer support has to have a length that equals 80% of the platform length.

Now, if you have a wheelchair space that is a pass-through and it's on a platform, that changes it a little.

The first thing, the transfer support would have to be equal to the length of the platform.

And the 80% and equal to length, what they're really trying to do is to make sure that when you get to the platform, you can pretty quickly grab ahold of a standing support.

Now, there is an exception for these kind of pass-throughs. So if you have a pass-through space, you are only required to have the horizontal support on one side.

So usually you would have to have horizontal supports on each side, however, with this you only need to have it on one side.

And this is because you would have a choice to enter either side of the equipment, and you would have a right- or left-handed approach if needed.

So we're going to move forward with talking about supports.

Now, when we talk about supports, we are referring to supports as capable of assisting with independent transfer on to and off of the diagnostic equipment.

And you'll find the requirements for supports in M305 of the medical diagnostic equipment standard.

So when we talk about supports, we've not addressed the structural strength as we do in the ADA and ABA standards.

There are many more variables in the equipment type and the industry standards do address this in a way we feel was appropriate for the devices, so we did not include this for structural strength as we do for grab bars.

Now, we're going to talk a little bit about the provisions for supports. So we have transfer supports and then leg supports, and with that we're looking at stirrups.

As I mentioned before, we're not requiring leg supports, but if provided, we have standards that they would need to meet.

Now, we talked about head and back supports when in a reclined position. And it's important to note that although we talked about these different supports, we do not have provisions for positioning supports like wedges or pillows that you would have when you try on a transfer surface.

Now, we also have provisions that address other types of supports. One of them is leg supports.

When a leg supports is provided, you must provide a method of supporting, positioning, and securing the patient's legs.

This requirement primarily addresses stirrups, but understand that the stirrup itself you would not have to have it provide all of these features.

That could be accomplished with additional supporting component.

Additionally we addressed head and back support where equipment is used in a reclined position. Now, head or back support, it must be provided in support for the entire range.

What we're really saying is we don't want anyone to have to transfer off the equipment and then back on again after you adjust it.

Once the patient transfers on the equipment, they should be able to stay on it for the head and back support needed to be adjusted.

We're going to talk a little about the cross-section. So the requirements for the cross-section profile of the supports are -- these are the same as they are in the ADA and ABA standards for accessible design.

Specifically section 609. There you find the requirements for the non-circular cross-section and the circular cross-section.

And what we say is that it has to be free of sharp or abrasive components. It has to have eased edges and shall not rotate within the fittings.

So in addition to using grab bars as a source for requirements, we also use handrails.

Now, there are some applicable requirements there that make sense for transfer supports.

And one thing is the minimum area of the gripping surface that can be obstructed.

The transfer support is required to provide a continuous uninterrupted area of gripping support and only 20% of this can be obstructed.

When I say "obstructed," I mean on the bottom. The top and sides can never be obstructed.

In addition, we have a clearance around the bar of 1.5 inches minimum, not maximum, to secure that there is space for knuckles or fingers where you can grab the support.

Now I'm going to move on to the section of the standard on communication. And you can find that standard -- the section is M306.

Now, we have an important requirement for communication access. And, again, this is communication for the patient, not employees, not the health providers, but where information is communicated through the equipment you must provide the communication in at least two methods of the three that we offer, which is audible, visible, and tactile.

So if you have a patient and you tell them, hold this position, as you might do in a standing machine, as we had here in the image on the slide, or you might say, as long as the light is on, maintain your position, or you might say, hold your breath, as you would typically do, have someone do in an MRI scan.

The equipment communicating to the patient, we're talking -- we're not talking about the instructions from the provider.

We're talking about the instructions provided to the equipment. So if you did that in addition, there is a visual aspect of it with the light.

So you would have to have either an audible or sound or tactile as well.

And so when I say "tactile," an example might be something like a lanyard, that you would hand to the patient and it would vibrate when the equipment was signaling something. So we're going to talk about the last piece, which is operable parts, which you find in section M307 of the medical diagnostic standard.

Now, again, this is only controls operated by the patient. For instance, if you had somebody on a scanning board or a scanning bed and you gave them a call button and said, if you have a problem with this press the button so we can stop the scan, now, that call button is an operable part covered by the standard, and it's required to be tactically discernible.

And this is trying to prevent like flush controls that are hard to feel.

We also address operations and operating force. Which should be usable with one hand and not require tight grasping, pinching or twisting of the wrist.

And no more than five pounds of force to use.

So we pretty much covered all of the technical standards associated with the medical diagnostic equipment. Now, a good companion piece to the MDE standard is the guidance issued by the Department of Justice on access to medical care for individuals with mobility disabilities. Now, this guidance addresses maneuvering situations in exam rooms, important information about lift use, and it covers so areas that the medical diagnostic standard does not. So this would be a good companion piece for you to look at as well.

Also, on this slide, this is the final standard where you can access the final standard for the medical diagnostic equipment. You can go directly to our website at www.Access-board.Gov and then click on the healthcare tab.

When you click on the healthcare tab, you see a link for medical diagnostic equipment, and you'll find the final standard housed there as well.

Okay, so what we're going to do is we talked about medical diagnostic equipment and we went over a lot of information related to that.

We're going to transition into a new topic and go over some of the guidance on prescription drug container labels. We're going to talk a little bit about that.

So persons with visual impairments who cannot print prescription drug container labels all too often report inadvertently taking the wrong medication, the wrong amount at the wrong time.

And under the wrong instructions, thereby endangering the health and safety of themselves and family members for whom they are caregivers.

So without having ready access to their prescription drug container label information, persons with visual impairments are also a risk of taking like expired medication, of not being able to obtain refills

in a timely manner, and of being unable to detect pharmacy errors. Now, the majority of persons who become blind or visually impaired do so after the age of 60, a time when multiple medications are prescribed and when persons may experience physical and cognitive conditions, which heighten the necessity for safe, consistent, reliable and independent access to prescription drug container label information.

So what did the Access Board do to address this?

So the board has led the development of advisory guidance on making prescription drug container labels accessible to people who are blind or visually impaired or elderly.

Now, this initiative was authorized by the Food and Drug Administration Safety and Innovation Act, which was signed by President Obama into law in July 2012.

So what is a prescription drug container label?

In summary, a prescription drug container label has a legal requirement, as it's a legal document that must be prepared by the pharmacist filling the prescription.

Now, the pharmacist must ensure the accuracy of the prescription drug container label and include on the label all elements required by applicable state law.

And also there is a universality component, as prescription drug container label standards, format, appearance and content and language are required to be universal when developing a prescription drug container label.

And then lastly, there is an independent agency, the U.S. pharmacopeial, that sets quality, purity, strength and identity standards concerning prescription drug container labels. So I talked about the Food and Drug Administration Safety and Innovation Act, which President Obama signed into law in July 2012.

A provision of the act, section 904, directed the board to do a few things. And it did a few things related to prescription drug container labels.

One was to convene a working group comprised of representatives from advocacy organizations and industry.

Two was to develop best practices for making information on prescription drug container labels accessible to people who are blind or visually impaired.

Now, shortly after the law was enacted, what the board did was they formed a working group on accessible prescription drug container labels.

They formed an 18-member stakeholder panel. And the working group explored various access alternatives, including Braille, like large print labels, auditory technologies, and submitted to the board its best practice recommendations for the pharmacies on providing independent access to prescription drug container labels.

Now, I want to be clear that in developing best practice recommendations, they are advisory only. Not mandatory. And will not have the force of kind of guidelines or standards like the ADA or ABA standards.

Now, the board's primary directive was to develop best practice recommendations for pharmacies providing independent access to prescription drug container labels.

In getting back to section 904 of the Food and Drug Administration Safety and Innovation Act, there were additional directives as well.

And one is the law directed the National Council on Disability to conduct an informational and educational campaign in cooperation with the stakeholder working group and developed -- that was developed by the U.S. Access Board. And that was to inform the public, including people with disabilities and pharmacists of the best practices.

Two, the law also called on the comptroller general to conduct a review to assess to the extent which pharmacies are implementing the best practices and determine where the barriers to prescription drug labels remain.

So there are a variety of delivery methods available for producing accessible prescription drug container labels. I'm going to go over a few of them today.

So hard copy Braille and large print.

So a pharmacist filling prescriptions procedures produces hard copy Braille and large print labels upon request, and it fixes the accessible label to the prescription drug containers.

Another delivery method could be digital voice or text-to-speech recorder.

So this would be something like a small electronic device that a pharmacist affixes to a prescription drug container when activated by pushing a button on the device, the patient hears the information printed on the prescription drug container label. Another one would be a smart devices and computers.

So many patients with visual impairments use their own computers, and smart devices equipped with electronic Braille, large print, and audio technology to access electronic text.

So visually impaired computer users, particularly those who are Deaf-Blind may request access to prescription drug container labels, using their computers and smart devices either via Internet applications or in combination with dedicated equipment with like a USB drive.

We're going to round this out talking about best practice recommendations that the board developed.

First you'll find the link below, the link here on the slide, and the link has the recommendations you can access for the complete best practice documentation.

So I'm going to go over a few of the recommendations according to the report, and one of the best things according to the report that the pharmacist can do is the communication piece.

So being able to advertise local or when possible a toll-free telephone number to promote communication between patient and pharmacist is important.

Also, if pharmacy websites and applications are made available to patients, be sure to ensure that websites and apps and accessibility -- you have accessible apps, or that they're 508 compliant.

So when a pharmacist observes a patient or patient representative having, like, reading difficulty, offer education counseling, in a setting that maintains patient privacy.

Also, make available options for accessible prescription drug container labels in audible, Braille, large print formats via methods using, for example, hard copy, dedicated devices and computer or smart devices.

So make it a wide range of available options for people.

Also maintain patient privacy in accordance with the HIPAA laws and rules when preparing accessible prescription drug container labels.

And lastly, do not impose like a surcharge or extra fee for an individual to cover the cost of providing an accessible drug container label and equipment dedicated for prescription drug container label access.

So as I said before, you can find the complete list of best practice recommendations on the site here that we have, directly on our website.

And what I want to do is just to make sure at the end we have a resource page where we have a direct link for this as well.

So that concludes my presentation on medical diagnostic equipment and prescription drug container labels. We do have some time for questions.

Before we get into questions a little bit, I did want to mention one thing. Right now we have a medical diagnostic equipment mailbox that you can send any question to, which I'll talk about in a little bit.

So generally we get questions, and I wanted to kind of go over like the basic questions that we get pretty much right now.

Right now the question that we get really often is: When do the standard MDE standards go into effect?

And as we talked about earlier, we talked about this already, that the MDE standards were made official in 2017, February 8th, 2017, that's when it was officially -- the rule was official.

Also, on top of that, it has not been adopted by an enforcement agency. So once an enforcement agency adopts the standard, they are the ones who add the scoping to it, so you know the who, what, when and where in terms of the medical diagnostic equipment, okay? I wanted to put that out there because we get that question a lot.

>> LEWIS KRAUS: Okay, Randall, Bobby, thank you so much for that. That was an excellent presentation. So we have some questions, and for those of you listening, please remember to submit your questions in the chat window. And Randall and Bobby and I will get to them in a moment.

The first question -- maybe you kind of answered it, but let me ask again.

Has any agency adopted the medical diagnostic equipment standards as mandatory besides the VA?

>> Unfortunately, no one has adopted it yet. I guess what can happen is that right now the standard -- the standards have been clear and they have been established, but you're right, until one of the enforcement agencies actually adopts it, it is still voluntary.

>> LEWIS KRAUS: Okay. Next question.

This is for when you -- actually, they're talking about some of the images that you used, and they said that -- the part where you remain seated in the wheelchair.

The illustrations use manual wheelchairs. Are there accommodations in place for people who use power wheelchairs that put that person much higher?

>> We don't have it separated from manual versus powered wheelchairs, so the seated position requirements are the same regardless if it's a powered wheelchair or if it's a manual wheelchair.

But that's a good point.

>> So just to follow up on Bobby's answer, for the height adjustable, the low and high, we have the highway up at 25 inches, which is much higher than any transfer height that you usually see in the ADA.

And that's you know, to try to accommodate the larger power chairs that have seat heights much higher.

But when it came to knee and toe clearance, you know you have to kind of accommodate both, the large power chairs but also the people in manual chairs who sit quite low.

So we ended up staying with 27 inches minimum. So, of course, you can provide more knee and toe clearance than that, but sometimes it may be challenging, because if you have mammography equipment that needs to get all the way down to 26 inches, the platform needs to get all the way down there you know you need to make sure that you don't provide so much that your equipment is unable to reach the lows it needs to get to at times.

>> LEWIS KRAUS: Thanks for that answer.

Okay. Next question: Do you have examples of specific models of exam tables and other equipment that meet the guidelines?

Like, for example, they're saying the Mid Mark 626, or other things.

>> We don't have like specific examples or items that show exactly what exam tables are and which ones would meet the requirement, but what we have on the slide that I'll talk about at the end, the ADA National Network, they did a good job of describing, you know, exam tables and exam chairs, and then they kind of give a description of each of those, so it's very... and they make it really easy to understand.

So that might be something that you may be able to use as a resource as well.

>> LEWIS KRAUS: I believe you can find that on the ADA website under the healthcare section.

>> Yep, that's it.

>> LEWIS KRAUS: Okay. Next question: Would an example of a general exception under M201 be equipment for testing bone mineral density?

I have been told these tables cannot be lowered due to machinery underneath.

>> Repeat the question one more time. I'm sorry.

>> LEWIS KRAUS: Sure. Would an example of a general exception under M201 be equipment for testing bone mineral density...

>> Got it. Got it.

>> LEWIS KRAUS: ... the tables can't be lowered due to machinery underneath.

>> That's the thing we wanted to avoid, because I think we had a picture of a Dexa scan machine to measure bone density.

So the idea, in terms of that equipment is that, you know you have to have that space at the bottom. That's a function of the equipment.

So, you know, that equipment is possibly be able to use that exception, because you can't have it lowered, because that can basically alter what the intended use of the equipment is for.

>> LEWIS KRAUS: Thanks for that answer.

All right, so we realize that many of you may still have questions for speakers, and I apologize if you didn't get a chance to ask your question, but you can contact your regional ADA Center at 1-800-949-4232.

Or you can contact the Access Board as well.

You will receive an email with a link to an online session evaluation. Please complete the evaluation for today's program, as we value your input and want to demonstrate to our funder the importance of this event.

We want to thank our speakers today, Randall and Bobby, for sharing their time and knowledge with us.

>> Lewis, with I say one more thing?

>> LEWIS KRAUS: Please.

>> I just wanted to make reference, too, about the Access Board, we have a technical assistance line.

And you can talk to someone any time Monday through Friday from 10:00 a.m. to 5:00 p.m. And the phone number is on the slide, one of the slides that we have here as well.

And then also, if we didn't answer your question or if you have a question you didn't want to pose it in this forum, you can send it directly to our MD email box. That's MDE@Access-board.Gov.

Also, you can send your emails or questions about medical diagnostic equipment or prescription drug container labels, send it directly to me.

Stinnette@AccessBoard

Access-board.gov.

>> LEWIS KRAUS: You can get the slides from the ADAPresentations.org website in the healthcare section and you'll be able to get these links directly from there.

All right. So back to thanking you guys. Thanks so much for your time and sharing your knowledge with us.

I want to remind everybody that today's session was recorded.

It will be available for viewing next week at the ADAPresentations.org website under the archive section of the healthcare area.

And you can watch your email for the announcement of the next webinar, which will be on...

One second, let me look it up. I want to get it to you exactly.

The next one in May will be on -- it will be called "Who Let the Dogs and Miniature Horses in?"

Service animals in healthcare facilities. That will be on May -- sorry, I skipped a month. Sorry.

April 23, centers for Medicare and Medicaid, efforts to increase healthcare access and quality for people with disabilities.

So you can join us for that one on April 23rd. And I already told you what the May one is. You can see the entire schedule at ADAPresentations.org in this schedule section.

All right, everyone, thank you so much for attending today.

And we look forward to seeing you next month.

And thanks again, Randall and Bobby. And for the rest of you have a great afternoon!

Bye-bye!