

# **Survey on Use of Medical Equipment (Consent Disclaimer)**

## **Introduction**

**Thank you for thinking about being involved in this study. It is being done by the Rehabilitation Engineering Research Center (RERC) on Accessible Medical Instrumentation. The study is being led by Dr. Jill Winters, from Marquette University's College of Nursing in Milwaukee, WI.**

## **Your Participation in the Survey**

**The reason we have asked you to complete this survey is that we want to learn more about what types of *medical equipment* you may have found hard to use, or you think might present problems for you to use. Later, we will make changes to some equipment, making them easier for people with disabilities to use.**

**If you finish part or all of this survey, it means you understand how we will use the information you give us and you agree to take part in this study. Completing part or all of this survey is voluntary, and you can stop answering questions at any time, without penalty. Your identity will not be shared with anyone, and your answers will not be linked**

**to your name in any way. This site is password protected, so no one other than the researchers will have access to your information. Your name will not appear anywhere on the data we collect. About 200 healthcare providers, with and without disabilities, will participate in this study.**

### **Benefits and Risks of Participation**

**There are no direct personal benefits to you for filling out this survey. It will take about 30 to 90 minutes to finish. Although we don't expect any risks, there is a small chance you may get tired when completing the survey. Therefore, if you need to take a break, please do so.**

### **Authorization for Use and Disclosure of Protected Health Information**

**Completing this survey will involve your protected health information. You will be asked to provide information about your age, current state of health, and types of disability. This information will be stored in a password-protected computer and will only be available to Dr. Winters and the research team. No information will be collected that identifies you or connects you to the data you give us.**

**The health information you give us will help us find problems that healthcare providers have had with some medical devices. Reports will be shared with the public that describe the types of people who took part in the survey, and the problems they have had with some medical devices. Your information will be combined with everyone else's data. No information will be shared about individual people. This information will be kept secure until December 31, 2008, when it will be destroyed.**

**The private health information you provide may be reviewed by officials, in order to meet federal or state rules. Reviewers may include representatives from the Department of Health and Human Services, the Marquette University Institutional Review Board, and/or the Western University of Health Sciences Institutional Review Board.**

**You have the right to withdraw your permission/authorization, in writing, at any time. To withdraw, contact Dr. Jill Winters at the address at the bottom of this page, or by e-mail at [jill.winters@marquette.edu](mailto:jill.winters@marquette.edu), and let her know you are withdrawing your permission to use your protected health information. All of the health information you have already submitted as part of the study**

**will continue to be used, but no new information about you will be collected.**

**You may make a copy of these instructions for your records. Returning this survey shows that you agree to have your personal health information shared with the research team and used as described above.**

### **Contact the Researchers**

**You may ask questions of the research staff at any time during the study by contacting:**

**Erin Schwier**

**Center for Disability Issues and the Health Professions**

**Western University of Health Sciences**

**309 E. 2<sup>nd</sup> Street**

**Pomona, CA 91766-1854**

**Phone: (800) 832-0524**

**E-mail: [info@rerc-ami.org](mailto:info@rerc-ami.org)**

### **Technical Assistance**

**If you have any difficulty accessing or completing the survey or submitting the completed survey, please contact:**

**Erin Schwier**

**E-mail: [info@rerc-ami.org](mailto:info@rerc-ami.org)**

**Telephone: (800) 832-0524**

## **Getting Started**

**The purpose of this survey you are filling out is to help us learn about difficulties that some people with disabilities have had using some medical equipment, such as devices used for diagnosing and treating medical problems.**

**Thank you for helping us with this very important project!**

## **R1.2 National Survey Questions Part 1 / Personal**

**We need to collect personal information about you so that we can compare the results we get on this survey to the results of other similar surveys, like the U.S. Census and the National Health Interview Survey (NHIS).**

**Please mark the box next to your answer to each of the following questions. Please mark only one answer unless the instructions say you may mark more than one.**

**1. Do you currently work?**

- No**
- Yes, usually part time – On average, how many hours per week? \_\_\_\_\_**
- Yes, usually full time (40 or more hours per week)**

**2. What type of medical profession are you affiliated with?**

- Physician**
- Physician's Assistant**
- Nurse Practitioner**
- Clinical Nurse Specialist**
- Registered Nurse**
- Licensed Practical/Vocational Nurse**
- Nursing Assistant**

- Physical Therapist**
- Occupational Therapist**
- Respiratory Therapist**
- Speech Therapist**
- X-Ray Technician**
- Dentist**
- Dental Assistant**
- Other – Please specify \_\_\_\_\_**
- I choose not to answer**

**3. What is your area of specialization?**

- Cardiology**
- Community Health**
- Ear, Nose, & Throat**
- Emergency/Urgent Care**
- Endocrinology**
- Gastroenterology**
- General Medicine**
- Gerontology**
- Home Health**
- Neurology**
- Nephrology**
- Neurosurgery**
- Obstetrics/Gynecology**
- Oncology**
- Ophthalmology/Optometry**
- Orthopedics**

- Pediatrics**
- Physical Medicine and/or Rehabilitation**
- Psychiatry**
- Psychology**
- Public Health**
- Pulmonary**
- Radiology**
- Rheumatology**
- Surgery**
- Other – Please specify \_\_\_\_\_**

**4. In what U.S. state do you practice? \_\_\_\_\_**

**5. Where is your medical facility located?**

- Rural community**
- Suburb**
- City**

## **R1.2 Questions Part 2 / Equipment**

**The reason we have asked you to complete this survey is we want to learn more about what kinds of medical equipment have been difficult for healthcare providers, with or without disabilities, to use when providing care for a variety of individuals, including people who have disabilities. Later, we will make changes to some of the identified equipment to make those devices easier to use.**

**The next section of the survey asks about your past experiences using various types of medical instrumentation and assistive technologies. There are four categories:**

- Procedural equipment**
- Diagnostic equipment**
- Therapeutic equipment**
- Assistive technologies, used either as or with medical equipment**

**You may have used some of these types of equipment at a medical clinic, hospital, or a person's home. We are interested in knowing about all the experiences you have had, in any location. Please consider the difficulties you have had using the equipment yourself, or when teaching a patient or family member to use the equipment.**

**Which of these types of equipment have you had experience using? (You will be asked to provide answers to questions only in these areas.)**

- Examination Tables**
- Medical/Examination/Procedure Chairs**
- Dental Equipment**
- Eye Exam Equipment**
- Hearing Test Equipment**
- X-ray Equipment**
- Cardiac Stress Test Equipment**
- Pulmonary Function Test Equipment**
- Rehabilitation Equipment**
- Exercise Equipment**
- Medication Administration Equipment**
- Respiratory/Oxygen Equipment**
- Monitoring Equipment (e.g., blood pressure, ECG, glucometer, INR, etc.)**
- Weight Scales**
- Mobility Aids**
- Communication Equipment (e.g., keyboard, mouse, monitor, personal digital assistant [PDA], telephone, cell phone, communication board, augmentative communication device, assistive listening system, etc.)**
- Electronic Healthcare Records**
- Other – Please specify \_\_\_\_\_**

## Questionnaire

Please indicate the experiences you have had with these types of medical equipment, if any, when caring for patients. Please feel free to elaborate on any items you select. Your feedback is greatly appreciated.

### Type of Medical Equipment:

#### *Examination Tables*

#### Your experience with Examination Tables:

- None
- Little
- Moderate
- Frequent
- Extensive

#### Your difficulty or discomfort with Examination Tables:

- None
- Little
- Moderate
- Extreme
- Impossible

Which of the following have you/your patients experienced when using Examination Tables?

Too high – Please describe:

Too low – Please describe:

- Too narrow – Please describe:**
- Too long – Please describe:**
- Too short – Please describe:**
- Too hard – Please describe:**
- Too soft – Please describe:**
- Problems with stirrups – Please describe:**
- Problems with positioning – Please describe:**
- Problems with transferring – Please describe:**
- Problems with step – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Examination Tables? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Medical/Examination/Procedure Chairs (e.g., dental, oral surgery, eye exam, laboratory, reclining procedure chairs [chemotherapy, dialysis, transfusion, etc.]***)

**Your experience with Chairs:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Chairs:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Chairs?**

- Too high – Please describe:
  
- Too low – Please describe:
  
- Too narrow – Please describe:
  
- Too long – Please describe:

- Too short – Please describe:**
- Too hard – Please describe:**
- Too soft – Please describe:**
- Problems with positioning – Please describe:**
- Problems with transferring – Please describe:**
- Problems with step – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Chairs? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Dental Equipment (e.g., x-ray equipment, drills, etc.)***

**Your experience with Dental Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Dental Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Dental Equipment?**

- Bite wings not proper sizes – Please describe:
  
- X-ray equipment – Please describe:
  
- Height of spittoon – Please describe:
  
- Latex sensitivity – Please describe:
  
- Instrument sizes – Please describe:
  
- Lighting – Please describe:

- Problems with suctioning – Please describe:**
  
- Problems with positioning – Please describe:**
  
- Problems with transferring – Please describe:**
  
- Problems with keeping patient’s mouth open – Please describe:**
  
- Problems with dental chairs – Please describe:**
  
- Discomfort – Please describe:**
  
- Unsafe – Please describe:**
  
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Dental Equipment? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Eye Exam Equipment* (e.g., vision test, glaucoma test, peripheral vision test, etc.)**

**Your experience with Eye Exam Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Eye Exam Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Eye Exam Equipment?**

**Problems with tonometry – Please describe:**

**Problems with gonioscopy – Please describe:**

**Problems with slit lamps – Please describe:**

- Problems with retinal cameras – Please describe:**
- Problems with topographers – Please describe:**
- Problems with lighting – Please describe:**
- Problems with adjusting chin rests – Please describe:**
- Problems with positioning – Please describe:**
- Problems with transferring – Please describe:**
- Problems with eye exam chairs – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Eye Exam Equipment?  
(Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Hearing Test Equipment*** (e.g., headphones, soundproof booth, etc.)

**Your experience with Hearing Test Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Hearing Test Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Hearing Test Equipment?**

- Soundproof booth too small – Please describe:**
  
- Problems getting into soundproof booth – Please describe:**
  
- Problems with communication – Please describe:**

**Problems with headphones – Please describe:**

**Problems with lighting – Please describe:**

**Discomfort – Please describe:**

**Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Hearing Test Equipment?  
(Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***X-Ray Equipment* (e.g., general x-ray, MRI, CT scan, PET scan, mammogram, bone density scan, ultrasound, radiation therapy, etc.)**

**Your experience with X-Ray Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with X-Ray Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using X-Ray Equipment?**

- Too high – Please describe:
  
- Too low – Please describe:
  
- Too narrow – Please describe:
  
- Too long – Please describe:
  
- Too short – Please describe:

- Too hard – Please describe:**
- Problems with positioning – Please describe:**
- Problems with transferring – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using X-Ray Equipment? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Cardiac Stress Test Equipment***

**Your experience with Cardiac Stress Test Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Cardiac Stress Test Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Cardiac Stress Test Equipment?**

**Problems with treadmill – Please describe:**

**Problems with cycle ergometer – Please describe:**

**Problems with electrodes – Please describe:**

**Discomfort – Please describe:**

**Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Cardiac Stress Test Equipment? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Pulmonary Function Test Equipment***

**Your experience with Pulmonary Function Test Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Pulmonary Function Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Pulmonary Function Test Equipment?**

- Problems reading displays – Please describe:
  
- Problems with transferring – Please describe:
  
- Problems with positioning – Please describe:

**Problems with mouthpieces – Please describe:**

**Problems getting into booth – Please describe:**

**Discomfort – Please describe:**

**Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Pulmonary Function Test Equipment? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Rehabilitation Equipment* (e.g., cardiac, pulmonary, occupational therapy, physical therapy)**

**Your experience with Rehabilitation Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Rehabilitation Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Rehabilitation Equipment?**

- Too high – Please describe:
  
- Too low – Please describe:
  
- Problems with treadmill – Please describe:
  
- Problems with cycle ergometer – Please describe:

- Problems with hand bike – Please describe:**
  
- Problems with weights/weight machines – Please describe:**
  
- Problems with tables – Please describe:**
  
- Problems with mats – Please describe:**
  
- Problems transferring – Please describe:**
  
- Problems positioning – Please describe:**
  
- Problems reading displays – Please describe:**
  
  
- Problems with touch screens – Please describe:**
  
  
- Problems with assistive devices – Please describe:**
  
  
- Discomfort – Please describe:**
  
  
- Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Rehabilitation Equipment?  
(Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Exercise Equipment* (e.g., exercise bike, treadmill, parallel bars, exercise mats, free weights, weight machines, etc.)**

**Your experience with Exercise Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Exercise Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Exercise Equipment?**

- Too high – Please describe:
  
- Too low – Please describe:
  
- Problems with treadmill – Please describe:
  
- Problems with cycle ergometer – Please describe:

- Problems with hand bike – Please describe:**
  
- Problems with weights/weight machines – Please describe:**
  
- Problems with tables – Please describe:**
  
- Problems with mats – Please describe:**
  
- Problems transferring – Please describe:**
  
- Problems positioning – Please describe:**
  
- Problems reading displays – Please describe:**
  
  
- Problems with touch screens – Please describe:**
  
  
- Problems with assistive devices – Please describe:**
  
  
- Discomfort – Please describe:**
  
  
- Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Exercise Equipment? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Medication Administration Devices (e.g., IV infusion pumps, syringes, etc.)***

**Your experience with Medication Administration Devices:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Medication Administration Devices:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Medication Administration Devices?**

- Problems with reading markings on syringes – Please describe:**
  
- Problems with reading displays – Please describe:**
  
- Problems with touch screens – Please describe:**

- Problems with manipulating equipment – Please describe:**
- Problems with reading labels – Please describe:**
- Problems hearing alarms – Please describe:**
- Problems opening pill bottles – Please describe:**
- Problems with removing medications from packaging – Please describe:**
- Problems with pill cutters – Please describe:**
- Problems with dial-a-flows – Please describe:**
- Problems with IV poles – Please describe:**
- Problems with IV pumps – Please describe:**
- Problems with syringes – Please describe:**

- Problems with self-injection in areas not easily accessible – Please describe:**
- Problems with insulin pens – Please describe:**
- Problems with insulin pumps – Please describe:**
- Problems with eye droppers – Please describe:**
- Problems with inhalers – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Medication Administration Devices? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Respiratory/Oxygen Equipment* (e.g., ventilators, oxygen delivery devices, nebulizers, suction devices, etc.)**

**Your experience with Respiratory/Oxygen Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Respiratory/Oxygen Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Respiratory/Oxygen Equipment?**

- Problems with touch screens – Please describe:**
  
- Problems with reading displays – Please describe:**
  
- Problems with manipulating equipment – Please describe:**

- Problems with noise – Please describe:**
- Problems with portability – Please describe:**
- Problems with weight of equipment – Please describe:**
- Problems with sterilizing/cleaning equipment – Please describe:**
- Problems with connecting/disconnecting tubing – Please describe:**
- Problems with changing settings – Please describe:**
- Problems with plugging in equipment – Please describe:**
- Problems with changing batteries – Please describe:**
- Problems with setting/disarming alarms – Please describe:**
- Problems with hearing alarms – Please describe:**

- Problems with masks – Please describe:**
- Problems with nasal cannulas – Please describe:**
- Problems with CPAP – Please describe:**
- Problems with nasal ventilators – Please describe:**
- Problems with regulators – Please describe:**
- Problems with opening and measuring medications for nebulizers – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Respiratory/Oxygen Equipment? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Monitoring Equipment (e.g., glucometer, spirometer, pulsoximeter, heart monitor, blood pressure cuff, thermometer, stethoscope etc.)***

**Your experience with Monitoring Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Monitoring Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you experienced when using Monitoring Equipment?**

- Procedures too complicated – Please describe:
  
- Buttons too small – Please describe:
  
- Mobility restriction – Please describe:

- Problems with touch screens – Please describe:**
  
- Problems with reading displays – Please describe:**
  
- Problems with displays disappearing too quickly – Please describe:**
  
- Problems with manipulating equipment – Please describe:**
  
- Poorly fitting blood pressure cuffs – Please describe:**
  
- Blood pressure difficult to obtain with one hand – Please describe:**
  
- Blood pressure tubing too short – Please describe:**
  
- Problems with calibration – Please describe:**
  
- Problems with plugging in equipment – Please describe:**

- Problems with changing batteries – Please describe:**
- Problems with setting/disarming alarms – Please describe:**
- Problems with hearing alarms – Please describe:**
- Problems with getting good seal on ear thermometers – Please describe:**
- Problems with getting blood on testing strips correctly – Please describe:**
- Problems with latex sensitivity – Please describe:**
- Problems with using lancets – Please describe:**
- Problems with electrodes – Please describe:**
- Problems with lead wires – Please describe:**

**Problems with pulsoximeters – Please describe:**

**Discomfort – Please describe:**

**Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Monitoring Equipment?  
(Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Weight Scales* (e.g., standing, chair, wheelchair, bed, etc.)**

**Your experience with Weight Scales:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Weight Scales:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Weight Scales?**

- Too high – Please describe:
  
- Too low – Please describe:
  
- Too narrow – Please describe:
  
- Problems with balance – Please describe:

- Problems with standing – Please describe:**
  
- Problems with positioning – Please describe:**
  
- Problems with transferring – Please describe:**
  
- Problems with step – Please describe:**
  
- Problems with accuracy – Please describe:**
  
- Problems with capacity – Please describe:**
  
- Problems with visual display – Please describe:**
  
- Problems with standing scale – Please describe:**
  
- Problems with chair scale – Please describe:**
  
- Problems with wheelchair scale – Please describe:**

**Problems with sling scale – Please describe:**

**Problems with bed scale – Please describe:**

**Discomfort – Please describe:**

**Unsafe – Please describe:**

**Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Weight Scales? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Mobility Aids* (e.g., cane, walker, crutches, wheelchair, scooter, transfer/lift equipment, etc.)**

**Your experience with Mobility Aids:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Mobility Aids:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Mobility Aids?**

- Unable to properly fit – Please describe:
- Unstable – Please describe:
- Too high – Please describe:
- Too low – Please describe:
- Too wide – Please describe:

- Too narrow – Please describe:**
- Too heavy – Please describe:**
- Too bulky – Please describe:**
- Too hard to use – Please describe:**
- Too noisy – Please describe:**
- Cumbersome – Please describe:**
- Not sturdy enough – Please describe:**
- Can't use without hands – Please describe:**
- No head support – Please describe:**
- Not visible enough – Please describe:**
- Problems with balance – Please describe:**
- Problems with stability – Please describe:**
- Problems with cushions – Please describe:**

- Problems with positioning – Please describe:**
- Problems with transferring – Please describe:**
- Problems with back support – Please describe:**
- Problems with maneuvering – Please describe:**
- Problems with handles – Please describe:**
- Problems with carrying things – Please describe:**
- Problems with changing batteries – Please describe:**
- Problems with re-charging – Please describe:**
- Problems with stability on wet pavement – Please describe:**
- Problems with foot supports – Please describe:**

- Problems with maintenance/repairs – Please describe:**
- Problems with flat tires – Please describe:**
- Problems with brakes – Please describe:**
- Problems with durability/dependability – Please describe:**
- Problems with controls – Please describe:**
- Problems with keeping clean – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Mobility Aids? (Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Communication Equipment* (e.g., keyboard, mouse, monitor, personal digital assistant [PDA], telephone, cell phone, communication board, augmentative communication device, assistive listening system, etc.)**

**Your experience with Communication Equipment:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Communication Equipment:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you/your patients experienced when using Communication Equipment?**

Procedures too complicated – Please describe:

Buttons/keys too small – Please describe:

Mobility restriction – Please describe:

- Problems with speech recognition – Please describe:**
- Problems with others understanding you – Please describe:**
- Problems with hearing – Please describe:**
- Problems with touch screens – Please describe:**
- Problems with reading displays – Please describe:**
- Problems with displays disappearing too quickly – Please describe:**
- Problems with manipulating equipment – Please describe:**
- Problems with grasping/holding – Please describe:**
- Problems with keyboards – Please describe:**
- Problems with computer mice – Please describe:**

- Problems with computer monitors – Please describe:**
- Problems with personal digital assistants (PDAs) – Please describe:**
- Problems with telephones – Please describe:**
- Problems with cell phones – Please describe:**
- Problems with TTY lines – Please describe:**
- Problems with software – Please describe:**
- Problems with communication boards – Please describe:**
- Problems with augmentative communication devices – Please describe:**
- Problems with assistive listening system – Please describe:**
- Too heavy – Please describe:**

- Too bulky – Please describe:**
- Too hard to use – Please describe:**
- Too noisy – Please describe:**
- Cumbersome – Please describe:**
- Not sturdy enough – Please describe:**
- Can't use without hands – Please describe:**
- Problems with maintenance/repairs – Please describe:**
- Discomfort – Please describe:**
- Unsafe – Please describe:**
- Other – Please describe:**

**What changes might be made to improve the ease and/or comfort of using Communication Equipment?  
(Please describe.)**

***Move to next category of equipment you have had experience using.***

**Type of Medical Equipment:**

***Other* – Please specify:**

**Your experience with Other Devices:**

- Little
- Moderate
- Frequent
- Extensive

**Your difficulty or discomfort with Other Devices:**

- None
- Little
- Moderate
- Extreme
- Impossible

**Which of the following have you experienced when using (other equipment)?**

Please describe:

Please describe:

Please describe:

**What changes might be made to improve the ease and/or comfort of using (other equipment)? (Please describe.)**

**Do you have any other comments about medical instrumentation?**

**If you have a disability, does the design of the medical equipment with which you work limit your ability to care for patients/clients? If so, please share some of your thoughts/experiences about this with us.**

**R1.2 National Survey Questions  
Part 3 / Personal**

**1. What sex are you?**

- Female
- Male

**2. How old are you?**

- 18-24 years old
- 25-44 years old
- 45-64 years old
- 65-74 years old
- 75 years or older

**3. Are you Spanish/Hispanic/Latino?**

- No
- Yes, Mexican, Mexican-American, or Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Spanish/Hispanic/Latino  
(Please specify): \_\_\_\_\_

**4. What race are you? (Please mark all that apply)**

- White
- Black or African American
- American Indian or Alaska Native  
(Please enter name of enrolled or principal tribe): \_\_\_\_\_

- Asian Indian
- Chinese
- Filipino
- Japanese
- Korean
- Vietnamese
- Other Asian (Please specify): \_\_\_\_\_
- Native Hawaiian
- Guamanian or Chamorro
- Samoan
- Other Pacific Islander (Please specify):  
\_\_\_\_\_
- Some other race (Please specify):  
\_\_\_\_\_

**5. What condition(s) do you have? (Please mark all that apply.)**

- Vision impairment
- Hearing impairment
- Speech impairment
- Orthopedic impairment
- Back or spine condition
- Arthritis or rheumatism
- Absence or loss of arm or leg
- Traumatic brain injury (head injury)
- Spinal cord injury
- Paralysis

- Cerebrovascular disease (including stroke)**
- Cerebral palsy**
- Parkinson's disease**
- Myasthenia Gravis**
- Multiple Sclerosis**
- Muscular dystrophy**
- Chronic pain**
- Learning disability**
- Mental retardation**
- Other developmental disability**
- Alzheimer's disease or other dementia**
- Frequent depression**
- Frequent anxiety**
- Schizophrenia**
- Other psychiatric disability**
- Heart condition**
- High blood pressure**
- Lung or respiratory condition**
- Diabetes**
- Cancer**
- Latex sensitivity**
- Other severe allergy or sensitivity  
(Please specify) \_\_\_\_\_**
- Other (Please list) \_\_\_\_\_**
- I do not have a condition that causes me difficulty**

**6. Do you have difficulties with: (Please check all that apply.)**

- Reaching**
- Grasping**
- Pinching**
- Twisting your wrist**
- Pushing buttons**
- Shaking/tremor**
- Feeling shapes/surfaces**
- Feeling hot and cold**
- Feeling sharp and dull**
- None**

**7. Do you ever use any of the following? (Please mark all that apply.)**

- Cane, crutches, or walker**
- Manual wheelchair**
- Powered wheelchair, electric scooter, or similar aid**
- Eyeglasses (for distance or reading) or contact lenses**
- Hearing aid**
- Other: \_\_\_\_\_**
- None**

**After you have completed this you may send it to us by mail using the prepaid envelope, or in another envelope addressed to:**

**Jill M. Winters, PhD, RN  
Marquette University  
College of Nursing  
P.O. Box 1881  
Milwaukee, WI 53201-1881**

***Thank you for participating in our project!***

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**If you would be willing to be contacted for future research in this area, please provide us with your name, address, telephone number, and/or e-mail address below. This information will not be filed with the information you provided on this survey. It will automatically be re-directed to another secure, password protected file. We will not access this information until after this survey has been completed and results have been analyzed.**

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Telephone:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_