

adaptive equipment occupational therapy assistive devices

Adaptive Equipment, Occupational Therapy, and Assistive Devices: Revolutionizing Independence and Industry Implications

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Introduction:

The landscape of occupational therapy is undergoing a significant transformation fueled by advancements in adaptive equipment occupational therapy assistive devices. These devices are no longer simply aids; they are sophisticated tools that empower individuals to participate more fully in their daily lives, improving their independence and quality of life. This article explores the evolving role of adaptive equipment occupational therapy assistive devices, discussing their implications for the industry, and highlighting the future direction of this crucial field.

H1: The Expanding World of Adaptive Equipment Occupational Therapy Assistive Devices

The term "adaptive equipment occupational therapy assistive devices" encompasses a wide range of tools designed to address diverse physical, cognitive, and sensory challenges. This includes everything from simple adaptive eating utensils to complex robotic exoskeletons. The sheer breadth of these devices reflects the increasing understanding of individual needs and the technological advancements that make personalized solutions possible. Examples include:

Adaptive Clothing: Magnetic closures, hook-and-loop fasteners, and easy-to-manage clothing designs ease dressing challenges for individuals with limited dexterity or range of motion.

Assistive Eating Utensils: Weighted utensils, built-up handles, and rocker knives improve grip and control for individuals with tremors or weakness.

Mobility Aids: Wheelchairs, walkers, and canes are essential for maintaining mobility and independence. Advanced features like power assist and smart technology are constantly emerging.

Communication Devices: Augmentative and alternative communication (AAC) devices, including

speech-generating devices and picture exchange systems, enable individuals with communication difficulties to express their needs and thoughts.

Environmental Control Units (ECUs): These devices allow individuals with limited mobility to control various aspects of their environment, such as lights, television, and appliances.

Prosthetics and Orthotics: Advanced prosthetics and orthotics are increasingly sophisticated, incorporating sensors, microprocessors, and robotic components to enhance functionality and comfort.

H2: Implications for the Occupational Therapy Industry

The proliferation of adaptive equipment occupational therapy assistive devices has profound implications for the occupational therapy industry:

Increased Demand for Specialized Skills: Therapists need specialized training in assistive technology assessment, prescription, and training. This requires ongoing professional development and investment in education.

Shifting Roles: Occupational therapists are increasingly acting as consultants and technology integrators, guiding clients through the complex process of selecting, adapting, and utilizing assistive devices.

Interprofessional Collaboration: Effective utilization of adaptive equipment occupational therapy assistive devices often necessitates collaboration with other healthcare professionals, engineers, and technicians.

Technological Advancements: Keeping abreast of the latest technological innovations is crucial for therapists to provide the most effective and up-to-date interventions.

Reimbursement Challenges: Securing appropriate reimbursement for assistive technology can be a significant barrier, requiring advocacy and effective communication with insurance providers.

H3: The Future of Adaptive Equipment Occupational Therapy Assistive Devices

The future of adaptive equipment occupational therapy assistive devices is bright, with exciting advancements on the horizon. We can expect to see:

Increased personalization: Devices will become increasingly customized to individual needs and preferences through the use of 3D printing and other advanced manufacturing techniques.

Integration of Artificial Intelligence (AI): AI-powered devices will provide personalized feedback, adaptive assistance, and predictive capabilities.

Improved accessibility: The cost of assistive devices will decrease, making them more accessible to a wider range of individuals.

Enhanced usability: Devices will be more intuitive and easier to use, minimizing the learning curve for both clients and caregivers.

Conclusion:

Adaptive equipment occupational therapy assistive devices are transforming the lives of individuals with disabilities, promoting independence, and improving their quality of life. The occupational therapy industry is evolving to meet the challenges and opportunities presented by this rapidly expanding field. By embracing innovation, investing in education, and advocating for equitable access, we can ensure that everyone benefits from the transformative power of assistive technology.

FAQs:

1. What is the difference between adaptive equipment and assistive devices? While often used interchangeably, adaptive equipment modifies existing tools or environments, whereas assistive devices are specifically designed to aid in a particular task.
1. How do I find a qualified occupational therapist specializing in assistive technology? You can search online directories of occupational therapists or contact your physician for referrals.
1. What are the common funding sources for assistive devices? Funding can come from private insurance, Medicare/Medicaid, and various charitable organizations.
1. How is assistive technology assessed for individuals? Occupational therapists conduct comprehensive assessments to determine individual needs and the most appropriate assistive technologies.
1. What is the role of technology in the future of occupational therapy? Technology will continue to drive innovation, leading to more personalized, effective, and accessible interventions.
1. Are there any ethical considerations regarding assistive technology? Ethical considerations include ensuring accessibility, promoting autonomy, and avoiding stigmatization.
1. How can I participate in research related to assistive technology? Many universities and research institutions conduct research in this field; contacting them directly may provide opportunities.
1. What is the process for obtaining an assistive device through insurance? It typically involves a referral from a physician or therapist, followed by an assessment and documentation of medical necessity.

1. Where can I find resources and support for assistive technology users? Various organizations and online communities offer resources, support, and information on assistive technology.

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adaptive equipment occupational therapy assistive devices: Community-based Rehabilitation World Health Organization, 2010 Volume numbers determined from Scope of the guidelines, p. 12-13.

adaptive equipment occupational therapy assistive devices: *Choosing Assistive Devices* Helen Pain, D. Lindsay McLellan, Sally Gore, 2003 The authors of this work have brought together research about the needs of people with disabilities and the equipment available for them. They explain issues involved with choosing equipment and provide guidance on selection.

adaptive equipment occupational therapy assistive devices: Cook & Hussey's Assistive Technologies Albert M. Cook, Janice Miller Polgar, 2008-01-01 It's here: the latest edition of the one text you need to master assistive strategies, make confident clinical decisions, and help improve the quality of life for people with disabilities. Based on the Human Activity Assistive Technology (HAAT) model, *Assistive Technologies: Principles and Practice*, 4th Edition provides detailed coverage of the broad range of devices, services, and practices that comprise assistive technology, and focuses on the relationship between the human user and the assisted activity within specific contexts. Updated and expanded, this new edition features coverage of new ethical issues, more explicit applications of the HAAT model, and a variety of global issues highlighting technology applications and service delivery in developing countries. Human Activity Assistive Technology (HAAT) framework demonstrates assistive technology within common, everyday contexts for more relevant application. Focus on clinical application guides you in applying concepts to real-world situations. Review questions and chapter summaries in each chapter help you assess your understanding and identify areas where more study is needed. Content on the impact of AT on children and the role of AT in play and education for children with disabilities demonstrates how AT can be used for early intervention and to enhance development. Coverage of changing AT needs throughout the lifespan emphasizes how AT fits into people's lives and contributes to their full participation in society. Principles and practice of assistive technology provides the foundation for effective decision-making. NEW! Global issues content broadens the focus of application beyond North America to include technology applications and service delivery in developing countries. NEW! Ethical issues and occupational justice content exposes you to vital information as you start interacting with clients. NEW! More case studies added throughout the text foster an understanding of how assistive technologies are used and how they function. NEW! Updated content reflects current technology and helps keep you current. NEW! Explicit applications of the HAAT model in each of the chapters on specific technologies and more emphasis on the interactions among the elements make content even easier to understand.

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daily living. Written by experts in neuropsychology and technology development, *Assistive Technology for Cognition* provides a comprehensive overview of the efficacy of technologies to assist people with brain impairments. Based on the list provided by the International Classification of Function, each chapter covers a different cognitive function; namely, attention, memory, affect, perception, executive function, language, numeracy, sequencing, and navigation onto which existing and future assistive technologies for cognition are mapped. This structure provides in-depth research in an accessible way, and will allow practitioners to move from an assessment of cognitive deficits to the prescription of an appropriate assistive technology for cognition. The chapters also make suggestions for future developments. *Assistive Technology for Cognition* will be of great interest to clinicians and researchers working in brain injury rehabilitation, technology developers, and also to students in clinical psychology, neuropsychology, and allied health disciplines.

adaptive equipment occupational therapy assistive devices: The Future of Disability in America Institute of Medicine, Board on Health Sciences Policy, Committee on Disability in America, 2007-10-24 The future of disability in America will depend on how well the U.S. prepares for and manages the demographic, fiscal, and technological developments that will unfold during the next two to three decades. Building upon two prior studies from the Institute of Medicine (the 1991 Institute of Medicine's report *Disability in America* and the 1997 report *Enabling America*), *The Future of Disability in America* examines both progress and concerns about continuing barriers that limit the independence, productivity, and participation in community life of people with disabilities. This book offers a comprehensive look at a wide range of issues, including the prevalence of disability across the lifespan; disability trends the role of assistive technology; barriers posed by health care and other facilities with inaccessible buildings, equipment, and information formats; the needs of young people moving from pediatric to adult health care and of adults experiencing premature aging and secondary health problems; selected issues in health care financing (e.g., risk adjusting payments to health plans, coverage of assistive technology); and the organizing and financing of disability-related research. *The Future of Disability in America* is an assessment of both principles and scientific evidence for disability policies and services. This book's recommendations propose steps to eliminate barriers and strengthen the evidence base for future public and private actions to reduce the impact of disability on individuals, families, and society.

adaptive equipment occupational therapy assistive devices: Occupational Therapy Meral Huri, 2017-07-05 This new book presents the growing occupational therapy knowledge and clinical practice. Occupational therapy, as a health profession, is concerned with preserving well-being through occupations, and its main goal is to help people participate in the activities of daily living. This is achieved by working with people to improve their ability to engage in the occupations they want to engage in or by changing the occupation or the environment to better support their occupational engagement. The topic of the book has been structured on occupational therapy framework and reflects new research, techniques, and occupational therapy trends. This useful book will help students, occupational therapy educators, and professionals to connect occupational therapy theories and the evidence-based clinical practice.

adaptive equipment occupational therapy assistive devices: Occupational Therapy Toolkit, 2018-04 Fully revised and expanded in 2018. The Occupational Therapy Toolkit 7th edition is a collection of 354 full-page illustrated patient handouts. The handouts are organized by 97 treatment guides and are based on current research and best practice. This 787 page practical resource is the BEST resource for every therapist working with physical disabilities, chronic conditions or geriatrics.

adaptive equipment occupational therapy assistive devices: The Promise of Assistive Technology to Enhance Activity and Work Participation National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division, Board on Health Care Services, Committee on the Use of Selected Assistive Products and Technologies in Eliminating or Reducing the Effects of Impairments, 2017-09-01 The U.S. Census Bureau has reported that 56.7 million Americans had some type of disability in 2010, which represents 18.7 percent of the civilian

noninstitutionalized population included in the 2010 Survey of Income and Program Participation. The U.S. Social Security Administration (SSA) provides disability benefits through the Social Security Disability Insurance (SSDI) program and the Supplemental Security Income (SSI) program. As of December 2015, approximately 11 million individuals were SSDI beneficiaries, and about 8 million were SSI beneficiaries. SSA currently considers assistive devices in the nonmedical and medical areas of its program guidelines. During determinations of substantial gainful activity and income eligibility for SSI benefits, the reasonable cost of items, devices, or services applicants need to enable them to work with their impairment is subtracted from eligible earnings, even if those items or services are used for activities of daily living in addition to work. In addition, SSA considers assistive devices in its medical disability determination process and assessment of work capacity. The Promise of Assistive Technology to Enhance Activity and Work Participation provides an analysis of selected assistive products and technologies, including wheeled and seated mobility devices, upper-extremity prostheses, and products and technologies selected by the committee that pertain to hearing and to communication and speech in adults.

adaptive equipment occupational therapy assistive devices: Assistive Technology Solutions in Minutes Book III Therese Willkomm, 2021-05-30 Low cost assistive technology solutions made in minutes from everyday materials

adaptive equipment occupational therapy assistive devices: Patient-lifting Devices in Hospitals Frank Bell, 1984 This book is concerned not merely with the technical merits of deficiencies of particular aids to patient-lifting, but also with a discussion of the need for aids, their availability and their actual utilisation. The work is based on a five-year investigation. Focusing particularly on mobile hoists. Throughout the book attention is paid to four factors; The patient, the attendant, the task and the environment.

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adaptive equipment occupational therapy assistive devices: Assistive Technologies and Computer Access for Motor Disabilities Kouroupetroglou, Georgios, 2013-08-31 Individuals with disabilities that impede their range of motion often have difficulty accessing technologies. With the use of computer-based assistive technology; devices, tools, and services can be used to maintain and improve the functional capabilities of motor disabilities. Assistive Technologies and Computer Access for Motor Disabilities investigates solutions to the difficulties of impaired technology access by highlighting the principles, methods, and advanced technological solutions for those with motor impairments. This reference source is beneficial to academia, industry, and various professionals in disciplines such as rehabilitation science, occupational therapy, human-computer interface development, ergonomics, and teaching in inclusive and special education. This publication is integrated with its pair book Disability Informatics and Web Accessibility for Motor Limitations.

adaptive equipment occupational therapy assistive devices: Occupational Therapy for Physical Dysfunction Diane Dirette, 2019-12-17 Designed to help students become effective, reflective practitioners, this fully updated edition of the most widely used occupational therapy text for the course continues to emphasize the "whys" as well as the "how-tos" of holistic assessment and treatment. Now in striking full color and co-edited by renowned educators and authors Diane Powers

Dirette and Sharon Gutman, Occupational Therapy for Physical Dysfunction, Eighth Edition features expert coverage of the latest assessment techniques and most recent trends in clinical practice. In addition, the book now explicitly integrates "Frames of Reference" to help students connect theories to practice and features a new six-part organization, thirteen all-new chapters, new pedagogy, and more.

adaptive equipment occupational therapy assistive devices: Assistive Technology Assessment Handbook Stefano Federici, Marcia Scherer, 2017-11-23 Assistive Technology Assessment Handbook, Second Edition, proposes an international ideal model for the assistive technology assessment process, outlining how this model can be applied in practice to re-conceptualize the phases of an assistive technology delivery system according to the biopsychosocial model of disability. The model provides reference guidelines for evidence-based practice, guiding both public and private centers that wish to compare, evaluate, and improve their ability to match a person with the correct technology model. This second edition also offers a contribution to the Global Cooperation on Assistive Technology (GATE) initiative, whose activities are strongly focused on the assistive products service delivery model. Organized into three parts, the handbook: gives readers a toolkit for performing assessments; describes the roles of the assessment team members, among them the new profession of psychotechnologist; and reviews technologies for rehabilitation and independent living, including brain-computer interfaces, exoskeletons, and technologies for music therapy. Edited by Stefano Federici and Marcia J. Scherer, this cross-cultural handbook includes contributions from leading experts across five continents, offering a framework for future practice and research.

adaptive equipment occupational therapy assistive devices: **I Can't Stop Shaking** Sandy Kamen Wisniewski, 2006-02 I Can't Stop Shaking, Over 10 Million People are Affected By Essential Tremor, provides important medical information, tips on living with Essential Tremor, as well as personal accounts of people living with Essential Tremor. In the medical section Dr. Peter A LeWitt, a neurologist who sub-specializes in movement disorders, answers questions about Essential Tremor. Dr. LeWitt has been practicing neurology and been involved with Essential Tremor since 1980. Dr. LeWitt explains in simple terms what Essential Tremor is, how it affects people, and medical treatments for Essential Tremor. In the personal stories section people who have Essential Tremor speak candidly and openly about what life is like living with Essential Tremor. Each person has their own way of dealing with it, some with great optimism, others with equally great frustration. Readers who have Essential Tremor will no doubt see bits and pieces of themselves within these stories. There are also dozens of tips on better ways of living with Essential Tremor that will help the sufferer to better cope with their handicap. Some of the tips inside the book are: .Use an electric toothbrush. .Tell the people at your bank that you have ET .Use credit and debit cards instead of writing checks. .Use eating utensils that have large handles. .Use a 1 in.-deep dish that has vertical sides. .Hold your drinking glass in the palm of your non-dominant hand and steady it with your dominant hand. .Eat with the utensil pointing toward you with as much twist to your wrist as you can manage. Sandy Kamen Wisniewski was diagnosed with ET when she was 14 years old. During her childhood she hid her tremor by tucking her hands in her pockets or up her sleeves. She also avoided many social situations where eating in public was necessary. She spent her young adulthood unaware the so many people had Essential Tremor so she struggled alone. Then in 1999 she learned that a group of people with Essential tremor were meeting at a public library and were having a neurologist as a guest speaker. After the meeting she realized for the first time she wasn't alone. In 2001 Sandy found the courage to finally speak out about Essential Tremor and wrote a personal essay titled I Couldn't Stop Shaking, which was published in Woman's Day magazine in May 2001. Since that time she has written numerous articles on Essential Tremor, spoken to groups around the country about Essential Tremor, in addition to being interviewed on Chicago's WGN news and WLS News. She also appeared on the Debra Duncan Show, a Disney sponsored talk show, about ET. Sandy is a freelance writer, business owner, mother and wife. She resides in Libertyville, Illinois.

adaptive equipment occupational therapy assistive devices: *Essentials of Assistive Technologies* Albert M. Cook, Janice Miller Polgar, 2011-12-16 Master the assistive strategies you need to make confident clinical decisions and help improve the quality of life for people with disabilities with this new essentials text. Based on the Human Activity Assistive Technology (HAAT) model developed by Dr. Cook, the book provides the most important coverage of the devices, services, and practices that comprise assistive technology and focuses on the relationship between the human user and the assisted activity within specific contexts. Case studies, illustrations of assistive devices, review questions, and well-developed learning objectives help you focus on the most important areas of assistive technology application. - UNIQUE! OTA focus provides you with the specific information occupational therapy assistants need to know to implement and utilize assistive technologies. - Comprehensive coverage includes all areas of assistive technologies. - The AT industry - A historical perspective on the industry - Relevant legislation - Issues of professional practice - Service delivery in assistive technologies - General purpose assistive technologies - Specific areas of application for assistive technologies - And more - Content derived from market leader gives you similar chapters and organization to the Principles text, but has more of a focus on the practical skills and knowledge needed for the implementation of AT.

adaptive equipment occupational therapy assistive devices: *International Handbook of Occupational Therapy Interventions* Ingrid Söderback, 2014-11-25 Advanced therapies and technologies, new service delivery methods, and care upgrades in underserved areas are translating into improved quality of life for millions with disabilities. Occupational therapy parallels this progress at the individual level, balancing short-term recovery and adaptation with long-term independence and well-being. This Second Edition of the International Handbook of Occupational Therapy Interventions builds on its ground-breaking predecessor by modelling current clinical standards rooted in scientific evidence-based practice. Its interventions are applied to a diverse range of client disabilities, with many new or rewritten chapters on workplace and vehicle accommodations, smart home technologies, end-of-life planning, and other salient topics. New introductory chapters spotlight core competencies in the field, from assessing client needs and choosing appropriate interventions to evaluating programs and weighing priorities. And for increased educational value, interactive case studies allow readers an extra avenue for honing clinical reasoning and decision-making skills. Of particular note is a new chapter providing a taxonomy—the Occupational Therapy Intervention Framework—and a validation study of its categories and concepts, delineating the occupational therapist's roles and the expected outcomes. Intervention areas featured in the Handbook include: ● Adaptive interventions, OTs manage and facilitate clients' adaptations. ● Learning interventions, OTs teach and the clients learn or relearn. ● Enabling interventions, OTs enable clients to be meaningfully occupied. ● Preventing interventions, OTs prevent ill-health and promote clients' ability to sustain health in daily life. The Second Edition of the International Handbook of Occupational Therapy Interventions is career-affirming reading for all members of rehabilitation teams, including occupational and physical therapists and rehabilitation nurses. Students intending to enter this growing field and professionals working toward its continued improvement will find it useful and inspiring.

adaptive equipment occupational therapy assistive devices: *Raising a Sensory Smart Child* Lindsey Biel, Nancy Peske, 2009-08-25 A fully revised edition of the most comprehensive guide to sensory processing challenges At last, here are the insights and answers parents have been searching for. —Dr. Temple Grandin For children with sensory difficulties—those who struggle process everyday sensations and exhibit unusual behaviors such as avoiding or seeking out touch, movement, sounds, and sights—this groundbreaking book is an invaluable resource. Sensory processing challenges affect all kinds of kind—from those with developmental delays, learning and attention issues, or autism spectrum disorder to those without any other issues. Now in its third edition, *Raising a Sensory Smart Child* is even more comprehensive and helpful than ever. In this book, you'll learn: * How the 8 senses (yes, 8!) are supposed to work together and what happens when they don't * Practical solutions for daily challenges—from brushing teeth to getting dressed to

handling holiday gatherings * Strategies for managing sensitivities to noise, smell textures, and more * Sensory diet activities that help meet sensory needs, with new ideas for kids, teens, adults, and families * Parenting tips for handling discipline, transitions, and behavioral issues * How to practically and emotionally support children and teens with autism and sensory issues * Ways to advocate for your child at school and make schools more sensory smart * How to help your child with sensory issues use technology effectively and responsibly * Ways to empower your child and teen in the world * Where to get the best professional help and complementary therapies

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adaptive equipment occupational therapy assistive devices: Cerebral Palsy Mintaze Kerem Gunel, 2016-09-21 Nowadays, cerebral palsy (CP) rehabilitation, along with medical and surgical interventions in children with CP, leads to better motor and postural control and can ensure ambulation and functional independence. In achieving these improvements, many modern practices may be used, such as comprehensive multidisciplinary assessment, clinical decision making, multilevel surgery, botulinum toxin applications, robotic ambulation applications, treadmill, and other walking aids to increase the quality and endurance of walking. Trainings are based on neurodevelopmental therapy, muscle training and strength applications, adaptive equipment and orthotics, communication, technological solves, and many others beyond the scope of this book. In the years of clinical and academic experiences, children with cerebral palsy have shown us that the world needs a book to give clinical knowledge to health professionals regarding these important issue. This book is an attempt to fulfill and to give "current steps" about CP. The book is intended for use by physicians, therapists, and allied health professionals who treat/rehabilitate children with CP. We focus on the recent concepts in the treatment of body and structure problems and describe the associated disability, providing suggestions for further reading. All authors presented the most frequently used and accepted treatment methods with scientifically proven efficacy and included references at the end of each chapter.

adaptive equipment occupational therapy assistive devices: Physical Therapy for Children - E-Book Robert J. Palisano, Suzann K. Campbell, Margo Orlin, 2014-04-25 Used as both a core textbook in PT programs and as a clinical reference, *Physical Therapy for Children*, 4th Edition, provides the essential information needed by PTs, both student and professional, when working with children. Like the previous bestselling editions, the 4th edition follows the practice pattern categories of the *Guide to Physical Therapist Practice* and uses the IFC model of the disabling process as it presents up-to-date evidence-based coverage of treatment. In this latest edition, Suzann Campbell DeLapp, Robert J. Palisano, and Margo N. Orlin have added more case studies and video clips, additional chapters and Medline-linked references online, and Evidence to Practice boxes to make it easy to find and remember important information. Provides comprehensive foundational knowledge in decision making, screening, development, motor control, and motor learning, the impairments of body function and structure, and the PT management of pediatric disorders. Reflects a family-centered care model throughout to help you understand how to involve children and their caregivers in developing and implementing intervention plans. Emphasizes an evidence-based approach that incorporates the latest research for the best outcomes. Follows the practice pattern guidelines of the *Guide to Physical Therapist Practice*, 2nd Edition which sets the standard for physical therapy practice. Features the International Classification of Function, Disability, and

Health (ICF) of the World Health Organization (WHO) as the model for the disabling process, emphasizing activity rather than functional limitations and participation rather than disability in keeping with the book's focus on prevention of disability. Provides extensive case studies that show the practical application of material covered in the text and are often accompanied by online video clips illustrating the condition and its management. Makes it easy to access key information with plenty of tables and boxes that organize and summarize important points. Clearly demonstrates important concepts and clinical conditions you'll encounter in practice with over 800 illustrations. Takes learning to a deeper level with additional resources on the Evolve website featuring: Over 40 video clips that correspond to case studies and demonstrate conditions found in each chapter Helpful resources, including web links Questions and exercises you'll find helpful when preparing for the pediatric specialist certification exam

adaptive equipment occupational therapy assistive devices: Deep Brain Stimulation

Kelvin L. Chou, MD, Susan Grube, RN, MSN, Parag G. Patil, MD, PhD, 2011-12-21 In the United States, an estimated 42 million people suffer from some form of movement disorder. Common movement disorders include Parkinson's disease (PD), essential tremor (ET), and dystonia. Although medications may be helpful for these conditions, in many patients, symptoms cannot be controlled with medications alone. In such situations, their physicians may recommend a surgical procedure known as Deep Brain Stimulation (DBS). DBS is a revolutionary technology using an implanted device to deliver electrical stimulation to the brain to help symptoms, alleviate suffering, and improve quality of life. The Food and Drug Administration (FDA) approved DBS as a treatment for essential tremor in 1997, for Parkinson's disease in 2002, and dystonia in 2003. Deep brain stimulation has dramatically changed the lives of many patients with uncontrollable tremors. Patients often can resume normal activities, such as feeding and dressing themselves, and can have active and fulfilling lives. The need for anti-tremor medications is often reduced or eliminated. Though it's no longer considered experimental, DBS is, for now, still used as a second- or third-line treatment, reserved for patients with more advanced cases of the disease and those for whom medication alone is inadequate or can't be adjusted precisely enough to keep their tremors and writhing under control. However the idea of this surgery being a last resort is an evolving concept. Ten years ago doctors were operating on only the most severe, disabled, wheelchair-dependent patients, now they are operating on patients with moderate-to-severe cases of PD, ET and Dystonia. The thought is that this trend will continue. Instead of saying wait another five to ten years until you become more disabled doctors are realizing that the earlier they use DBS, the more they can improve the quality of life of their patients.

adaptive equipment occupational therapy assistive devices: Occupational Therapy Practice

Framework: Domain and Process Aota, 2014 As occupational therapy celebrates its centennial in 2017, attention returns to the profession's founding belief in the value of therapeutic occupations as a way to remediate illness and maintain health. The founders emphasized the importance of establishing a therapeutic relationship with each client and designing an intervention plan based on the knowledge about a client's context and environment, values, goals, and needs. Using today's lexicon, the profession's founders proposed a vision for the profession that was occupation based, client centered, and evidence based--the vision articulated in the third edition of the Occupational Therapy Practice Framework: Domain and Process. The Framework is a must-have official document from the American Occupational Therapy Association. Intended for occupational therapy practitioners and students, other health care professionals, educators, researchers, payers, and consumers, the Framework summarizes the interrelated constructs that describe occupational therapy practice. In addition to the creation of a new preface to set the tone for the work, this new edition includes the following highlights: a redefinition of the overarching statement describing occupational therapy's domain; a new definition of clients that includes persons, groups, and populations; further delineation of the profession's relationship to organizations; inclusion of activity demands as part of the process; and even more up-to-date analysis and guidance for today's occupational therapy practitioners. Achieving health, well-being, and participation in life through

engagement in occupation is the overarching statement that describes the domain and process of occupational therapy in the fullest sense. The Framework can provide the structure and guidance that practitioners can use to meet this important goal.

adaptive equipment occupational therapy assistive devices: Guidelines on the Provision of Manual Wheelchairs in Less Resourced Settings World Health Organization, WHO, Chapal Khasnabis, Johan Borg, 2008 The guidelines focus on manual wheelchairs and the needs of long-term wheelchair users. The recommendations are targeted at those involved in wheelchair services, ranging from design and planning, to providing or supplying wheelchairs and their maintenance.

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adaptive equipment occupational therapy assistive devices: Assistive Technology in the

Classroom Amy G. Dell, Deborah A. Newton, Jerry G. Petroff, 2016-02-22 This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. This up-to-date book shows how assistive technology can be used in all kinds of classrooms, at all grade levels, to enhance the teaching and learning of students with a wide range of disabilities. The emphasis is on the integration of assistive technology into the curriculum. It addresses the challenges teachers face when using assistive technology to teach new skills to students with disabilities, to increase their independence and productivity, and to provide them with access to the general education curriculum. The text discusses disability categories within the context of school-related tasks and technology-based solutions to avoid misleading readers into simply pairing a certain diagnosis with a certain tech tool. The new edition of Assistive Technology in the Classroom keeps readers abreast of relevant new developments in mobile devices and assistive technology through a new chapter on how to use assistive technology to create visual supports and promote positive behavior, chapter updates on available mobile devices, expanded information on Universal Design for Learning, and additional ideas and discussion on how to match technology tools to a student's specific needs and strengths.

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