

#### A publication of ACO Med Supply, Inc.

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THE MED SUPPLY LINE is an inside look at how orthopaedic products are making a positive difference in quality orthopaedic care. This publication, produced by ACO Med Supply, is designed to educate and inform orthopaedic surgeons, practice administrators, purchasing departments, physical therapists, and athletic trainers. The information contained in this publication is not intended to replace a physician's professional consultation and assessment. Please consult your physician on matters related to your personal health.

### SUCCESSFUL PARTNERING

s one of the nations leading independent academic orthopedic practices, OrthoCarolina is proud to have been a partner of ACO Med Supply for more than 10 years. From the DJO global and DonJoy lines to complete med-surg and rehab equipment, as we have grown and evolved, ACO Med supply has been responsive in keeping pace with our changing needs. ACO is able to handle all our needs in a timely and efficient manner. The level of DME knowledge they offer is some of the best in the market. ACO has become a valued partner that offers us the products and solutions to stay ahead in an ever changing healthcare market.

#### Sarah Reed

Post-Surgical Sales/ DME Sales Manager, On-line Retail Store Manager OrthoCarolina, Charlotte, NC

### **MEET OUR SALES TEAM**

#### **EXECUTIVE TEAM**



Stuart Ross Co-Founder & CEO



Greg Harmon Chief Sales Officer



Lynn Comstock, Chief Operations Officer



Ben Handlogten, Director of Operations



Devon Britts, Director of Sales



Aaron Argenta



Aaron Gresham



Alan Livingston



Andy Teden



Brian Gibbs



Craig Deiwert



David Lindsey



Grace Boerner

Jenn Lonning





Jared Plummer



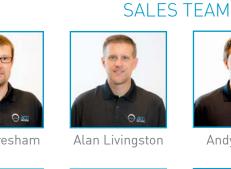
Mike Thaler















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Nick Bradley





Jim Reeks

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Rob Bowen



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Rod Ferguson



Joe Klun

MOTION MD<sup>°</sup> Moving your business foward

### PROTOCOL DRIVEN SOFTWARE APPLICATIONS

n the coming years medical offices in general, and Orthopedic clinics in particular, are only expected to get busier and busier treating an active, and aging population. The need for efficiency has never been greater.

Just as technology has changed the way business is done in most markets; Appropriate Use Criteria (AUC) applications is changing the way patients are managed within the doctor offices. The purpose of AUCs is to improve patient care and obtain the best outcomes while also considering circumstances specific to individual patients in making clinical decisions. As technology continues to be an integral part of our healthcare system, more and more specialties, and specialty suppliers, are having dramatic impacts on the way care is dispensed.

The American Academy of Orthopedic Surgeons (AAOS) recently launched its' Appropriate Use Criteria (AUC) software; an application that upon entering a patients symptoms and other pertinent information, offers protocol options for treatment. AUC helps ensure the highest quality of care for patients and are an example of best practices and indications for treating patients in the safest and most cost efficient way. Other medical specialties using AUC are the American College of Cardiology, the American College of Radiology, the North American Spine Society, the American Society of Nuclear Cardiology, and the American Academy of Dermatology.

AUC have the distinct advantage of using clinicians' "real-life" experiences and combining them with available evidence to produce realistic and practical criteria that can be applied to multiple patient profiles. AUC attempts to help guide a clinician's decision before a treatment or procedure is performed, but should not be seen as a replacement for a clinician's judgment, expertise, and/or experience.

Just as AUC technology has been helpful in patient care, that same technology model is also assisting in DME management within the clinic. As the Orthopedic DME arena has become more complicated to navigate. DME companies continue to stretch for innovative ways to assist in management of DME within the clinic. With the change in billing codes for bracing, determining off-theshelf versus custom, and still up in the air - who will be allowed to fit the patients; the need for support in DME management is increasing. DME protocol driven software applications are designed to be beneficial in a similar way as AUC software. They are designed to assist in time management, staff resource management, billing efficiencies and, inventory management.

DJO Global will soon be releasing a new software application called Motion MD. This program will link a diagnosis code with DME products commonly dispensed for a particular code. Choosing the product(s) dispensed for the patient will trigger the entire flow of, prescribing, dispensing, patient signature, billing for the products, and lastly generate an order for stock replenishment. Having DME managed in such a way reduces staff time, office waste, improves charge capture, and creates a paperless and more efficient process.

Just as in utilizing AUC applications, DME management applications are not meant to replace the doctor's expertise, but assist in highlighting the DME best practice options within a particular diagnosis. In order to be profitable now and into the future, maximizing all of the tools available to ensure efficiency reigns at the top of the priority list in our ever-change American healthcare system.

### ACO CELEBRATES 20 YEARS OF DEDICATED SERVICE

aco

Ver the past 20 years, ACO Med Supply Inc. has built its company on a foundation of customer commitment and service excellence. The healthcare landscape has changed over the past 20 years and the issues facing providers two decades ago are quite different from those today. As ACO Med supply has evolved with an ever changing healthcare market we still strive to provide high quality products and exceptional service that drives the industry.

ACO Med Supply was established June 1, 1995, as an orthopaedic specialty distributor covering North Carolina, South Carolina and Virginia. In its early days, the company represented three orthopaedic soft goods manufacturers – DonJoy, Procare and Tecnol – and operated out of a 2,500-square-foot warehouse with two employees and a sales team of nine reps.

In 2009, ACO moved into its current 52,000 square foot warehouse, establishing itself as one of the largest distribution centers for orthopaedic products in the Southeast. Today ACO represents over 250 manufacturers, offers over 8,000 products, boasts \$10 million in sales and is home to a sales, service and operation team of 70.

#### "We have continued to add talent to our sales organization, allowing us to position our company for substantial growth," says Stuart Ross, Co-Founder & Owner. "We now have over 50 sales reps and sales associates, along with a team of field service reps."

Our products are used by orthopaedic specialists, spine surgeons, primary care physicians, pain management specialists, physical therapists, podiatrists, chiropractors, athletic trainers and other healthcare professionals to treat patients with musculoskeletal conditions resulting from degenerative diseases, deformities, traumatic events and sports-related injuries. In addition, many of our nonsurgical medical devices and related accessories are used by professional athletes and patients for injury prevention and at-home physical therapy treatment. Our business model now provides a level of care directly to the patient, provider, facility and payor. "As the dynamics of healthcare continue to change for our customers we must be a total solution and partner that they can rely on to impact their success," says Ross. ACO Med Supply's programs are designed to work for large offices, while others are customized for smaller satellite locations. We deal with Medicare, Medicaid, private insurance, and are accredited by Joint Commission as a DME Supplier. By offering numerous billing and purchasing solutions, we align ourselves with our customers in complete patient care.

"Midlands Orthopaedics has partnered with ACO Med Supply for more than 10 years," says Ann Margaret McCraw, CEO, Midlands Orthopaedics, Columbia, S.C. "ACO has kept pace with us as our business model has evolved. Both ACO's leadership and local representatives have always strived to further our organizational goals even when they could have potentially benefited more by attempting to steer us in other directions. That unwavering support engenders a trust that rarely exists between clients and vendors."

In addition, the company has worked closely with progressive business consultants who have helped build and grow the organization, including John Boyens, sales process development; Dave Zerfoss, executive coach, leadership training & Vistage; and Greg Johnson, health care branding and marketing.

ACO Med Supply has continued to grow its partnership with DJO Global Inc., one of the largest non-surgical orthopaedic rehabilitation device companies in the United States and among the largest globally. DJO Global Inc. is a leading global provider of high-quality, orthopaedic devices, with a broad range of products used for rehabilitation, pain management and physical therapy. Our relationship as a DJO distributor has grown to over \$36 million over the last 10 years and enabled us to provide complete patient care, from beginning to end.

We proudly service medical communities in North Carolina, South Carolina, Georgia, Tennessee and Virginia, and we continue to grow. Along with our Charlotte-area location, we are also affiliated with Miotech Sports Medicine, a Michiganbased DJO distributor. The past 20 years have provided ACO with the drive and the industry specifics to provide its customers with exceptional, face-to-face service. The ACO team looks forward to many more years of providing dedicated service and creating value for their customers.

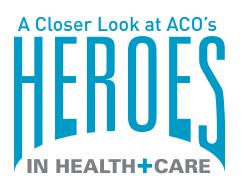
DONJOY



### **A22 REINVENTING CONFIDENCE** Perform at the Highest Level

Performing at the highest level is a consistent goal amongst athletes of all ages, abilities, shapes and sizes. Knee injuries don't have to compromise the capacity or desire to perform. For decades, DonJoy has pioneered solutions to assist clinicians who treat active patients. The innovative tradition continues with **A22**, the next generation of custom ACL knee bracing by DonJoy. As the world's first titanium brace, **A22** strikes the perfect balance of weight, strength and profile needed when patients are returning to activities of choice. Aerodynamic integration of straps and liners reduces overall profile which facilitates comfort, speed and cadence. When performance is important, **A22** is perfect.







or over five years, Dr. John Joseph Walsh IV, MD, Professor of Clinical Orthopaedic Surgery at USC Sports Medicine has been volunteering his time to the Christian Medical & Dental Association cause overseas.

The association holds a conference that provides stateof-the-art education on the latest advances in healthcare for physicians, dentists, nurses, nurse practitioners and physician's assistants practicing in developing countries to educate medical professionals overseas. Since 1978, the 10day, April/May conference has alternated each year between Chiang Mai, Thailand and Kenya. In 2014, the venue switched to Greece and produced the largest attendance ever. The Conference consists of lectures, breakout sessions and hands-on-workshops; and provides continuing education credits for HCPs' in the following groups: AAFP, Dentistry, Nursing, Nurse Practitioner, Physician, Physician Assistant & Certificate of Attendance.

Dr. Walsh, who has been attending the conference for over 5 years has taught HCPs' from over 60 different countries and is amongst the many people who make the association such a success. When speaking with Dr. Walsh he was quick to credit the many people involved with the association who dedicate their lives to serving and helping others. The CMDA conference is the world's largest meeting of healthcare professionals serving overseas. Over 100 volunteer faculty including Dr Walsh pay their own expenses to educate participants. Dr Walsh and volunteer physicians from around the US graciously pay their own expenses to assume participants' duties in their home facilities to cover for their absence while attending CMDA each year.

ACO Med Supply offers support to the cause each year by providing much needed medical supplies for Dr. Walsh and his team to use. Dr. Walsh utilizes the ACO donations to provide primary care docs and nurses who have limited experience with training on proper techniques such as casting, splinting and wound care. When Dr. Walsh was asked "What was one of the most impactful moments of the trip? He replied "Being able to meet the people that devote their lives to helping others".

Dr. Walsh has already signed up to volunteer his time as a member of the faculty for the CMDA conference being held at the Suan Bua Conference Center outside Chiang Mai Thailand on Monday, February 23, – Thursday, March 5, 2015.

#### Dr. John Walsh Walsh Christian Medical & Dental Associations® Changing Hearts in Healthcare

The following pre-conference workshops will be offered: Pediatric Advanced Life Support (PALS), Advanced Cardiac Life Support (ACLS), Advanced Life Support in Obstetrics (ALSO), Helping Babies Breathe (HBB), Neonatal Resuscitation Program (NRP), non-certificate minicourse ATLS, Hands-On Ultrasound Head-To-Toe, Diabetes Management Symposium, Orthopedic Splinting and Casting and Strategic Planning for Hospitals, Clinics and Health Programs. In addition, Basic Life Support (BLS for health care professionals as well as BLS for family and friends) will be conducted by appointment.

Dr. Walsh along with the many people who volunteer their time to the Christian Medical & Dental Association inspire the ACO Med Supply team and our customers. We would like to continue to share such stories of our communities Health Care Heroes. If you know of a Hero in Healthcare who is dedicated to helping others, you can nominate them to be featured in future publications of the Med Supply Line.

If you would like to contribute to Dr. Walsh and the Christian Medical & Dental Association cause overseas, ACO can direct inquiries to the appropriate organizations.



# ACO EMPLOYEE SPOTLIGHTS

As a new addition to The Med Supply Line, we are adding a special section dedicated to highlighting employees who play an essential role in ACO's growth and overall success. This employee spotlight gives ACO the opportunity to acknowledge individuals who demonstrate a work ethic and team spirit that ACO appreciates and values.



June 1st, 1995 seems long ago, but in many ways it seems just a few years back. On that date I interviewed with Stu in Applebees, he asked that I sell him the pen in his hand; after a successful interview, I felt sure I was headed into a sales career.

#### TIM VANSCHAICK, Senior Rep, East Central NC

I watched Stu try to sell the Donjoy GoldPoint braces to local doctors and clinics, while I was urging the doctors and therapists I worked with to use CTI. One thing that resonated with me early in my career, which still holds true today, is that if you have a passion for your work and the lines you carry, people will be drawn to you and your products.

ACO has a passion for their products, and, most importantly, their customers. I ask myself daily if I treat the customer the same way I would like to be treated. How well did I listen to their needs, and how can I be a resource for them in this ever changing world of medicine.

ACO's family has grown tremendously in so many ways over the years, but the common goal for all of us remains the same. Each and every day, working for ACO allows me the opportunity to sell great products to many great people who are both my customers and also my friends. Truly, as the Ol' saying goes, "time flies when you're having fun"!



I look at ACO as a team. Without all of us working together as a team, ACO would not be what it is today. Staring my new position in June of 2013, I was terrified because of my lack of knowledge in the orthopedic DME and med-surg

#### NANCY SALAZAR, Customer Service, Team Lead

field, but my co-workers welcomed me to the team and began teaching me what I needed to know. Early on, we developed a process to learn about our top 200 items so we could service our customers and outside sales reps to a higher level. Our top 200 item educational program turned into a successful project. The number one goal of the Customer Care Team is quality customer service. In March we sent all our platinum customers a survey of 7 questions that the customers can rate how we are doing as a company. This is still an ongoing project but I look forward to hearing feedback from our customers letting us know what we are doing well and how we can service them at the highest level. There has been a tremendous learning curve on the product offering itself, but the core competency of customer care stays the same no matter what industry you are in. With all the knowledge, passion and understanding of the business, I believe that I will continue to grow as the Customer Care team lead and play a significant role in the continued growth of ACO Med Supply.



### **VECTRA® NEO** Simplified, Powerful Solutions... Delivering the Results You Demand

Vectra Neo is the new standard in physical agent modalities. Its intelligent design (the result of over 100,000 hours of intensive R&D) is clever in its features, usability and clinical technology. An exceptional patient and therapist experience.

Every element of the Vectra Neo has been expertly crafted, allowing the clinician to provide unparalleled utilization of the powerful and thoughtful design, empowering them to provide patients with a comprehensive level of rehabilitation.

#### YOU DEMAND VERSATILITY AND CUSTOMIZATION

Vectra Neo responds with plug-andplay modules, user-defined menus, and advanced reporting

#### Custom made modality

Build the precise combination for your needs. The Vectra Neo has 4 module bays that accommodate the slide-in, plug-in-play module options: Channel 1-2 stim, Channel 1-2 stim/ EMG, Channel 3-4 stim, Laser and Ultrasound.

#### Customized Menus, Save Customized Treatments

Build your custom programs within the interface, save favorite or patientspecific treatments and customize the system to precisely fit your practice and your patient profiles.

#### **Customized Patient Reporting**

A high speed USB port allows simple and efficient transfer of patient information for therapy documentation and consultation.

#### YOU DEMAND EVIDENCE-BASED TREATMENT OPTIONS

A convenient, intuitive graphic interface promptly guides you to the most effective treatment protocol

#### Clinical Protocol Setup™

Vectra Neo is simple to use and a pleasure to navigate, thanks to the Clinical Protocol Setup (CPS), which leads you through the functions of the device and each therapy. With the power of Vectra Neo, you have a comprehensive reference library providing extensive information on therapy, treatments and pathologies - all at your fingertips. By selecting a patient's indications, a list of appropriate protocols will appear. Suggested protocols are accompanied by accessible clinical research references allowing you to identify and evaluate the documented evidence and outcomes. Not only will this aid in facilitating treatments that are tailored to the needs of each patient. it enables you to enhance your daily clinic efficiency and achieve an optimal balance between cost and quality of care. In addition, all of this is managed within the device or can be exported to a USB flash drive.

#### **Anatomical Library**

Vectra Neo offers a rich anatomical library that illustrates an array of pathologies, making it easier for you to communicate with patients about their condition and educate them on further treatment options both in and outside the practice.

#### You Demand Form & Function

Smart, innovative and ergonomic design make Neo the high performance choice

#### **Graphic User Interface**

Full-color, 10.4" LCD touchscreen displays commands, data and imagery in sharp, vivid detail, including a gorgeous anatomical library of classic anatomy images and lifelike pathology renderings.

#### Lead Wire Management

The innovative lead wire management systemensures access and organization around the full circumference of the unit. Applicators can be inserted into the right or left side for optimal positioning and easy connection.

#### **Screen Maneuverability**

The screen swivels and tilts to a 90-degree range for enhanced patient viewing, privacy and maximized practitioner accessibility.

#### **Integrated Applicator Cradles**

Durable and functional, Neo allows you to house an ultrasound applicator, laser applicator or both - whatever suits your needs. In addition, these applicator cradles are modular and can be detached from the base or switched.

#### **Cart or Tabletop Configuration**

A completely modular setup allows you to choose among the components that best fit your practice; an ergonomic base unit, a cart with 4 module bays, and 5 available treatment options. The unit has an integrated base with discreet, strong handles for carrying. The high-quality cart is stable, heightadjustable, moves with ease, and includes three roomy storage drawers with sturdy pull tracks.

#### **YOU DEMAND EASE OF USE**

Vectra Neo gives you confidence and control over your outcomes with an intuitive interface

#### **Precision at Your Finger tips**

Vectra Neo seamlessly guides both experienced and new operators through comprehensive menus and treatment parameters with intuitive software and clear, concise instructions. The easy-to-use touchscreen launches the full spectrum of features all from the home screen, making navigation to treatments, reference sites, patient history and more quick and simple.

#### **Electrode Placement Guide**

A comprehensive electrode placement guide with detailed descriptions and imagery ensures maximized treatment outcomes.

#### YOU DEMAND ENHANCED CLINICAL TECHNOLOGY

Vectra Neo's design and detail is the culmination of five years of extensive voice-of-customer, research and development to bring you a pioneer product in the field of rehabilitation

#### **Multipatient**

The Multipatient function gives you the ability to treat more than one\* patient at any one time.

#### **Unattended Therapy**

With Neo, you can initiate an electrotherapy session on a patient and allow it to cycle through while attending to other duties in the clinic.

The Vectra NEO is available for North Carolina, South Carolina and Virginia

### A SINGLE INVESTMENT... TO TREAT THE BROADEST OF PATIENT APPLICATIONS

IT ALL STARTS WITH BALANCE.

There's a phrase that goes something like, "When you're holding the hammer, all you see are nails." Loosely

interpreted, it means when you have but a single tool you want to use it on everything in your path. Well, the Biodex Balance System SD is that hammer and can be used on just about every application.

Proper balance is essential to the fundamentals of ambulation. Addressing balance therefore is appropriate to the older adult who may have a fear of falling; patients post knee or hip surgery, those with neurological impairments such as stroke, MS or Parkinson's disease, as well as athletes looking to return to the game after a concussion. Testing balance and/or postural sway is objectively measured when using Biodex technology. Summary

reports of subsequent training progress are equally objective, suitable for demonstration to referring physicians or reimbursement. In fact, Biodex recently enhanced their software to include G-code calculations and percentage of impairment to create a "magic bullet" for Medicare reimbursement.

Instituting a Fall Risk Screening & Conditioning program is the simplest entry point for the Biodex Balance System. It speaks to every older adult (and family members) in the community. In fact, Biodex offers a sample financial model that demonstrates, with moderate effort to growing the program, the device can pay for itself in a mere two months. Biodex provides access to marketing materials for facilities to promote their new Fall Risk program which spans letters and pamphlets to referring physicians, mailers to hospital discharge planners, press releases for community awareness and advertisements for local newspapers; even booth signage for a presence at Health Fairs.

Biodex puts similar muscle behind the Bal-

ance System SD when used for balance assessment in a concussion management program. A balance disturbance is a telltale sign that a concussion has not yet healed; with the assessment of balance now recognized as a component of best practice. Even after a cognitive test may have been passed, a decreased ability to

maintain balance can linger. For facilities seeking to build their concussion management program, the Balance

System SD is supported by marketing materials to solicit local leagues and teams as well as to educate referring pediatricians and neurologists. Offering a free or low-cost baseline test is the natural precursor to athlete's seeking your services after an injury, regardless if it's concussion related.



Whatever the pathology, there's a good chance that the Biodex Balance System™ SD is your hammer.

For more information on the Biodex Balance System SD, <u>www.biodex.com/balance</u>.





Patients are leaving the hospital sooner and DVT risk can last for 30 plus days post discharge. DJO Global introduces VenaPro, a truly portable device to help prevent post-operative DVT for moderate to high risk patients.

### VenaPro is designed for optimal patient comfort and compliance.

- No tubes or cords
- One button operation
- Weighs less than one lb
- Graduated and asymmetric compression
- Air releases to cool patients' legs
- USB Downloadable compliance data
- Re-chargeable battery (5-6 hour life)
- Applies 50mmhg once per minute

#### How can I get VenaPro?

DJO Global's hospital to home program (H2HDVT) is a simple one month rental program where we handle all the billing, shipping and patient education for a completely hassle free way to protect your patients at home.



### CHOICE OF FOOTWEAR MAY HELP KNEE OA





New study recommends flexible-soled shoes over stiffer ones.

earing flat and flexible shoes that allow your feet to move more naturally results in self-reported improvements in pain, function and quality of life among people with knee osteoarthritis (OA), according to a study presented at the American College of Rheumatology. Patients who wore these so-called mobility shoes for up to 48 weeks also appeared to have less force put on their knee joints.

OA is a chronic condition in which the material that cushions the joints, called cartilage, breaks down, causing the bones to rub against each other, resulting in stiffness, pain and loss of joint movement. About 27 million people in America have osteoarthritis; the knee is one of the most common joints affected. Knee OA can affect the kneecap (called patellofemoral OA), the inside edge of the knee (called medial compartment OA) and/or the outside edge (called lateral compartment OA). "When you have knee osteoarthritis and you wonder what kind of shoes would be best for your knees, maybe there should be a shift in thinking from going with supportive and cushioned footwear to a lightweight flexible shoe," says lead study author Najia Shakoor, MD, a rheumatologist and associate professor of medicine at Rush University Medical Center in Chicago.

To find out if the mobility shoe helps in patients with knee OA, Dr. Shakoor conducted a randomized, placebo controlled trial. In the first part of the study (which lasted six months), 22 patients were given a flexible shoe with a sole that had cuts in it designed to allow feet to bend as they naturally do barefoot. Twenty-eight other participants were given a control shoe that appeared identical, but had a much stiffer sole made of denser material and a metal plate to decrease its ability to bend. The study was "doubleblinded," which means that neither researcher nor participant knew who got which shoe.

Eleven mobility-shoe participants and 13 control-shoe participants continued with the study for an additional 18 months. The results presented at the conference are an analysis of the first 48 weeks.

After 48 weeks, researchers reported participants wearing the mobility shoes were nearly two times more likely to show self-reported improvements compared to the control group:

- 73 percent improvement in pain with mobility shoes compared to 37 percent with control shoes
- 70 percent improvement in function with mobility shoes compared to 40 percent improvement with control shoes
- 42 percent improvement in quality of life with mobility shoes compared to 11 percent with control shoes.

Some of these results are not what scientists call "statistically significant" – which means that they could occur by chance; the researchers say this may be due to the small sample size. However, a statistically significant greater number of participants in the mobility group (10 out of 11) were considered "responders" to treatment compared to the control group (6 out of 13).

Earlier results from a subset of participants in this same group were published in the May 2013 issue of Arthritis & Rheumatism. That analysis did not feature a control group but focused instead on 16 patients with knee OA who wore the mobility shoes at least six hours a day, six days a week for six months. After 24 weeks patients had an 18 percent reduction in the load on their inner (medial) edge of their knee – the place where most people develop knee OA.

Not only did those participants see improvements when wearing the mobility shoes, but when they were tested throughout the study period in their old shoes or barefoot, they continued to walk with an improved gait that reduced the load on their knees.

"We think when people wore these flexible shoes they changed the way they walked, so even when they put their old shoes on again, they were walking in a mechanically more advantageous way for their knees than they were before," says Dr. Shakoor, whose work is supported by funding from the Arthritis Foundation.

Dr. Shakoor and her team of researchers from Rush University also developed the mobility shoe used in these studies. The university has a patent for them and licensed the rights to a company called Dr. Comfort, which are sold through DJO Global. Rush University and the researchers involved receive a small percentage of royalties.

Marian T. Hannan, an associate professor of medicine at Harvard Medical School in Boston, Mass., has "It is impressive to think that [footwear] makes a difference. Shoes can be expensive but they are easy to change and it looks to have a training effect, which means it's not just the shoes but how the person interacts with their shoes."

done her own research about foot mechanics and pain in the knee. She says it is interesting to look at how a simple, non-surgical change in someone's footwear can help people dealing with painful OA that doesn't have a cure.

"It is impressive to think that [footwear] makes a difference. Shoes can be expensive but they are easy to change and it looks to have a training effect, which means it's not just the shoes but how the person interacts with their shoes," says Hannan. "Whether it's their foot or brain or the whole package, it appears to work. As a proof of concept it is very appealing."

John Hardin, MD, vice president of research for the Arthritis Foundation, agrees. **"I am always thrilled when** relatively low-cost and safe strategies promise benefit for patients with arthritis. Perhaps there is a subset of patients in whom mobility shoes will be just 'the thing.'"

Dr. Hardin, who is also professor of medicine and orthopaedic surgery at Albert Einstein College of Medicine, in the Bronx, N.Y., notes that gait mechanics – or how a person walks – clearly has a role in determining the stress on the knees, and it is possible that appropriate footwear might help minimize that stress.

Hannan points out that plenty of questions remain, including how long these benefits will last and how often you have to buy new shoes. And, she says, you do have to look carefully at study results when researchers are also inventors. **"They are upstanding people but you wonder about the unseen bias. Obviously they believe in this shoe. If they can prove everyone is blinded that would be key," Hannan says.** 

Dr. Shakoor says her researchers are blinded, and while she was involved in analyzing the data for initial pilot studies, she no longer does that for ongoing research. She also stresses that these shoes were designed in order to carry out research in this area and study the biomechanical effects of flexible footwear.

"These studies aren't meant to say you need this specific shoe, but more broadly to evaluate the biomechanical and clinical effects of flexible shoes versus stiff shoes," Dr. Shakoor explains.

In general when looking for shoes that will help patients with knee OA, Dr. Shakoor recommends people look for a flat shoe that is lightweight, soft and has a flexible and flat sole that easily bends and has no built in heel.

She and her team are still investigating why this design is beneficial but she believes it may be in part that the average shoe doesn't let your foot pronate, or turn in, which could increase loads in people with medial knee OA.

Melvyn Harrington, MD, an associate professor of orthopedic surgery at Baylor College of Medicine in Houston, Texas, says it is interesting that researchers are looking at the science and biomechanics of these shoes. But he says larger studies are needed to know if mobility shoes translate into a real improvement for patients. He says for now, weight loss is what's been shown to make the most difference in decreasing stress across the joints in the knee.



ever has there been a more talked about generation than the Baby Boomers. The reason for on-going discussion is valid. This demographic represents the largest American demographic, and will for some time to come. The aging population, and one that is living longer than ever is changing a multitude of markets, none more prominent than healthcare.

The health care system has gone through significant changes over the past 25 to 50 years, but more dramatic change lies ahead. Tomorrow's patients, and the tools and treatments offered to them will be very different from the patients we treat today. These differences present both opportunities and challenges for our system, and being prepared for what lies ahead will be critical.

#### A few statistics regarding Baby Boomers and health care services:

- The over-65 demographic will nearly triple as a result of aging Baby Boomers
- More than 6 of every 10 will have more than 1 chronic condition
- More than 1 of 3 (over 21 million) will be considered obese
- 1 in 4 (14 million) will be living with diabetes
- Nearly 1 of every 2 (more than 26 million) will have arthritis
- By 2030 there will be 8 times more knee replacements than are performed today

#### Top Ten Health Concerns of Baby Boomers

- 1. Type 2 Diabetes
- 2. Cardiovascular Disease
- 3. Cancer
- 4. Depression
- 5. Eye Problems
- 6. Alzheimers Disease
- 7. Arthritis and Joint Replacement
- 8. Osteoporosis
- 9. Flu/Pneumonia
- **10.** Sandwich Generation Stress

The health and wellness of the boomer generation has far-reaching implications, from public policy and taxation, to climbing insurance costs and the rise of new health care industries that cater to this older demographic. The healthcare system will have its hands full as boomers continue to retire in droves.

More medical capabilities, information and options are available to boomers compared to past decades. Boomers are taking advantage of the ability to seek out and find medical information online, enabling them to ask precise questions when visiting a doctor. Online information provides instant access to a "second opinion", or at least to the data they need that may prompt a request for a second opinion.

American boomers are expected to live longer than any previous generation, on average they can expect to live to the age of 83. Additionally, they are likely to remain independent and live in their own homes longer. There are 78 million U.S. Baby Boomers. Everyday almost 11,000 Boomers turn 50! The oldest of the boomers are turning 68 this year.

#### There are 4 key factors that play a role in how Boomers will impact our health care:

- As more and more Boomers age they'll require more health care services than any other generation of Americans.
- The prevalence of chronic diseases is increasing among this population.
- Their needs and expectations differ from generations before them.
- More medical information, services, and technologies are available to them than ever before.

Falls, both inside and outside the home are one of the most common causes of injury to older adults. As Boomers live longer, and stay active longer, the probability of trauma caused by falls will increase. More than one-third of adults 65 or older fall each year. Of those, 20-30% suffer moderate to severe injuries, such as hip fractures, reducing mobility and independence. Almost 350,000 hip fractures occurred in 2000, that figure is expected to double by 2050. The number of physician visits has been increasing for all populations – up by 34% over the last decade. By 2030, there will be nearly twice as many adult physician visits as there were in 2004, and Boomers will account for more than 4 of every 10 of these visits.

The severe workforce shortage will challenge the health care system's ability to meet this Boomer demand. In 2005, there was a U.S. shortage of about 220,000 registered nurses: by 2020 that gap will be over 1 million. The nursing shortage is caused by both increased demand and by the aging of the nursing workforce – nurses are Boomers too.

There is a shortage in a number of patient care positions (i.e. physicians, nurses, pharmacists, laboratory and imaging technicians, and others). The physician shortage is projected to steadily increase as the Boomers age, with a gap of 130,000 specialists and over 60,000 primary care providers predicted by 2020. This gap has led the Association of American Medical Colleges (AAMC) to call for a 30 percent increase in medical school enrollments. Physician shortages are projected to be most severe in the specialties that older Boomers need the most, such as Orthopaedics.

Health care delivery in the future will be markedly different. Patients want more control over their care, and new ways of delivering care will be essential if we are to meet the increased demand and growing incidence of chronic disease. Technologies are emerging that will make it easier to deliver care remotely and to more actively engage patients and their families. Hospitals are leveraging these technologies and broadening programs in ways that will dramatically change the face of healthcare for generations to come. Despite these advances, this wave of aging Baby Boomers will reshape the health care system forever. Not only will it take cooperation from all parts of the health care sector, it also will require societal intervention to promote wellness and improve the health of Americans. This larger effort is needed if we are to meet the growing health needs of our citizens.







**Exos™ Thermoformable Panels** A quick and easy way to ensure a personalized fit.

#### Simple, Light Weight, Low Profile Design

Designed with patient comfort in mind without sacrificing functionality.



exos Embrace the Reform

### EXOS™ SPINE BRACING SYSTEM

he Exos<sup>™</sup> Spine Brace transforms spine bracing. Designed with Exos<sup>™</sup> thermoformable technology and Boa<sup>®</sup> Technology's advanced closure system, the Exos<sup>™</sup> Spine Brace combines superior decompression and support, with the ability to quickly and easily customize fit. The end result is a spine brace that will change the way you deliver patient comfort and satisfaction.

#### Adjustable (Angle) Belt Wings

Independent Superior & Inferior Compression

Superior spinal decompression delivered through Boa® Technology's innovative and

elegant closure system.

The ability to angle the belt to accommodate different waist/torso contours to ensure an optimal fit.

### Shaping a Revolution

Innovation fueled by passion, guided by the functional beauty of the human form. Refined simplicity with smooth, beautiful lines. An optimized fit tuned to each body. Compromise nothing. Challenge the status quo. Reinvent, redefine, reimagine. Above all, form honors function. These were the inspiration for a visionary shift in spine bracing. Exos<sup>™</sup> is unrelenting in its quest to find new ways to shape care, comfort and healing in the human body, and the Exos<sup>™</sup> Spine Brace System is an opus in engineering, craftsmanship and detailed precision, built to deliver an unparalleled progression of modular support.

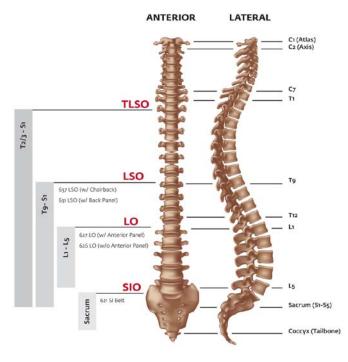
#### Modular Step-Up/Step-Down Design

The ability to adjust and configure your brace as you progress through rehabilitation and recovery.

#### Semi-Universal Design

Minimizes inventory management requirements.

#### **RANGE OF SPINAL SUPPORT**





Exos FORM<sup>™</sup> 631

The Exos FORM<sup>™</sup> 631 provides a higher degree of spinal support and relief from a wide range of indications from acute lower back pain to postoperative support. The Exos FORM<sup>™</sup> 631 provides superior sagittal control and support from Tg-Sh.



#### Exos FORM<sup>™</sup> 627

The Exos FORM™ 627 (with anterior panel) provides relief from a wide range of indications from mild to acute lower back pain, as well as post-operative support. The Exos FORM™ 627 provides superior sagittal control and support from L-1 to L-5.

#### COMMON INDICATIONS

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INDICATIONS	Exos FORM <sup>™</sup> 621	Exos FORM <sup>TM</sup> 626	Exos FORM <sup>TM</sup> 627	Exos FORM <sup>™</sup> 631	Exos FORM <sup>™</sup> 637
Sacroiliac Pain	•				
Acute and Chronic Lower Back Pain		•	•	•	•
Lower Back Sprains / Strains		•	•	•	•
Lumbar Disc Displacement		•	•	•	•
Osteoporosis		•	•	•	•
Disc Herniation and Degeneration		•	•	•	•
Post-Operative Laminectomy		•	•	•	•
Post-Operative Disectomy		•	•	•	•
Spondylolisthesis		•	•	•	•
Post-Operative Fusion				•	•
Spinal Stenosis				•	•
Stable / Non-Displaced Fractures				•	•
Compression Fractures					
Scoliosis					



#### Exos FORM<sup>™</sup> 626

The Exos FORM™ 626 that provides relief from mild lower back pain. The Exos FORM™ 626 provides superior sagittal control and support from L-1 to L-5.

#### Exos FORM<sup>™</sup> 637

The Exos FORM<sup>™</sup> 637 provides a higher degree of spinal support and relief from a wide range of indications from acute lower back pain to post-operative support. The Exos FORM<sup>™</sup> 637 provides supperior sagittal and coronal control and support from T9-S1.



#### Exos FORM<sup>™</sup> 621

The Exos FORM™ 621 provides superior stabilization of the sacroiliac (SI) joint through direct compression. Silicon grip strips prevent the brace from migrating.

DONJOY

# **KNOW PAIN? KNOW GAIN.**

### OA Reaction Web™ A Discreet Solution for Osteoarthritis Knee Pain

or sports medicine physicians dedicated to helping their patients return to an active lifestyle, the OA REACTION WEB is the lowest profile knee brace on the market to treat early or mild OA. The patented silicone web technology provides a custom fit that won't slip; it's so comfortable, patients may forget they're wearing a brace. Prescribe Motion with the OA REACTION WEB from DonJoy and the DJO Global family of brands. We believe Motion is Medicine.

#### Lightweight, Low-Profile Pain Relief

Prescribe Motion with a new level of bracing comfort for patients with early to mild OA of the knee, or early joint space narrowing. OA REACTION WEB offers discreet wearability utilizing mild offloading and proprioception to help reduce knee pain for mild to moderate activity.

#### **Patented Web Technology**

DonJoy, a pioneer in bracing technology, is taking OA bracing to the next level of comfort using breakthrough silicone web technology. OA REACTION WEB offers the thinnest and most open framework available.

#### **Discreet Pain Relief**

OA REACTION WEB gives those with OA knee pain the relief they need in a comfortable, lightweight, low-profile solution that can even be worn under clothing before, during and after activity. Designed for elderly patients who participate in mild activity, obese patients, and active aging patients who jog, hike or play tennis or golf.

### Technology That Helps Them Maintain or Regain Mobility

**Silicone Web Technology** scientifically designed to provide shock absorption and anterior knee pain relief treating OA of both the knee joint and the patella

**Low-profile Design** wear it under pants, skirts or with exercise clothing as a discreet solution for pain

**Four-way, Adjustable Wraparound Design** comfortable, form-fitting design creates a custom-like fit for most legs that is easy to apply

**Patented, Integrated Silicone** comfortable offloading of the knee with a nonslip cup effect; the hexagon design allows air pockets to gently support the knee

**Easy to Wear** the most open and lightweight design available in OA knee bracing

When you prescribe OA REACTION WEB from DonJoy, you prescribe confidence, backed by the proven experience of the DJO Global family of brands.

### Technology That Moves With You



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TOTALSUPPORT Original



TOTALSUPPORT® Max

PolySorb® WALKERRUNNER

Spenco RX® Orthotic

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