WILLIAM O. REED, JR., MD, MBA, FAAOS

3205 W 130th Street Leawood, Kansas 662109 Office: (913) 432-7200 Cell (913) 226-5559 wreed@handandspine.com Fax (877) 492-3737

SUMMARY

Practicing Orthopaedic Surgeon and senior healthcare executive with extensive CEO/COO leadership experience. Minimally invasive spine surgeon pioneer and practitioner in cervical, thoracic and lumbar spine. Investigator for thoracoscopic and laparoscopic and endoscopic spine techniques. Track record of achieving high levels of quality clinical care, financial performance, patient, physician and employee satisfaction. Proven ability in operations, strategic planning, performance improvement, facility development, expansion programs, human resources management, with board, medical staff, employee, community and political relations. A tireless leader focused on the achievement of organizational excellence through alignment of mission, vision and values, strategic plan development and execution of action plans. Lifetime commitment to turning physician competitors into effective colleagues, and building "Center of Excellence" care frameworks.

MEDICAL PROFESSIONAL EXPERIENCE

WILLIAM O. REED, JR., MD PA, MERRIAM, KS 5/2010 to present SOLO PHYSICIAN PRACTICE LIMITED TO UPPER EXTREMITY AND SPINE SURGERY FOUNDER AND DIRECTOR

Orthopaedic practice, solo, allowing maximal flexibility in merging and balancing patient care with business opportunities and responsibilities. Patient care limited to upper extremity and spinal surgery care.

PINNACLE HEALTHCARE SYSTEM DIRECTOR, SPINE SURGERY SECTION

Engaged first as contracted Orthopaedic minimally invasive spine surgeon, then employed 04/2017 as Director for the purpose of expanding the Orthopaedic and Spine Surgery service lines of Blue Valley Hospital and Boonville Hospitals, part of the Pinnacle Healthcare System. Added second spine surgeon, pain management anesthesiologist and orthopaedic surgeons. Continued in this capacity until Pinnacle Healthcare System filed Ch 11 and court appointed trustee chose to terminate all providers 04/2020.

GATEWAY REGIONAL MEDICAL CENTER

DIRECTOR, SPINE SURGERY SECTION

Engaged to initiate a complete spine surgery service line at this St. Louis metropolitan area hospital, part of the Quorum Healthcare System. Spine surgery did not exist at this facility, and I was sought out to fulfill the needs of a new service line in terms of equipment, facility design, personnel training, clinic organization, staffing and the beginning patient care duties as well as marketing responsibilities. Left after a one year engagement with a completed project, successfully delivering high quality care and ultimately making available a position for a new spine surgeon to engage.

LASER SPINE INSTITUTE

Orthopaedic Minimally Invasive Spine Surgeon

Expansion of LSI to new markets seemed promising but perceived to be overreaching and the LSI business plan unsustainable, so we parted ways.

ADVANCED SPINE AND ORTHOPAEDIC SPECIALISTS, P.A. *PRESIDENT/CEO*

Hand & Spine Orthopaedic Center, P.A. with added sports medicine fellowship trained orthopaedic surgeon, on site pain management anesthesiologist and injection suite, physiatrist and board certified electromyographer dictated a corporate

1/2015 TO 4/2020

5/2016 TO 5/2017

10/2014 TO 12/2014

3/2010 TO 5/2010

Page 1 of 15

WILLIAM O. REED, JR., MD, MBA, FAAOS

name change to reflect the expanded services now available at the same familiar location. Practice then sold to hospital entity, Dr. Reed remained independent entering solo practice again.

HEARTLAND HAND & SPINE ORTHOPAEDIC CENTER, P.A. *PRESIDENT/CEO*

Founder of Orthopaedic Spine and Upper Extremity sub-specialty medical practice in prestigious and competitive Johnson County, Kansas. Built the solo practice into a six practitioner thriving and respected destination for Upper Extremity and Spine total care.

- First in the Metro to offer all digital radiography
- First in the Metro to offer Minimally Invasive Upper Extremity surgical techniques.
- First in the Metro to offer Minimally Invasive Spine surgical techniques.
- FDA investigators for Laparoscopic Spine Fusion techniques and technology
- Active Spine Fellowship Training Program

FRANCISCO AND BUBB Chtd., Kansas City, KS EMPLOYED ORTHOPAEDIC SURGEON

Invited after residency to join the private practice group in Kansas City where I initially practiced general orthopaedic surgery in a clinic and multiple hospital setting. Gradually began limiting my practice to the upper extremity and spine realm where I felt my training a expertise would most benefit the community and my referral pattern reflected this recognition. 18 months after joining, the principals of the practice broke up the practice with a senior member retiring and other senior member taking an employed position.

DUKE UNIVERSITY MEDICAL CENTER, Durham, North Carolina

CHIEF RESIDENT, ORTHOPAEDIC SURGERY RESIDENCY

Teaching, care organization, program scheduling, ultimate clinical responsibility, resident surgeon resource allocation, medical records supervision, surgical care, medical care, and all aspects of clinical Orthopaedic Surgery Residency Program support at Duke University Hospitals and Clinics.

SENIOR RESIDENT, SPORTS MEDICINE, ORTHOPAEDIC SURGERY

Teaching, clinical and research responsibilities for Orthopaedic Surgery Residency Program, Sports Medicine and Surgery Laboratory and teaching facilities.

LENNOX BAKER CHILDREN'S HOSPITAL, Durham, North Carolina,& DUKE UNIVERSITY MEDICAL CENTER, Durham, North Carolina

SENIOR RESIDENT, CHILDREN'S ORTHOPAEDICS

Teaching and research responsibilities for Orthopaedic Surgery Residency Program, Children's Orthopaedic patients with congenital, cerebral palsy, injury, and genetic conditions requiring care and study.

INSTRUCTOR, ANATOMY, ORTHOPAEDIC SURGERY RESIDENCY

Teaching and research responsibilities for Orthopaedic Surgery Residency Program, Anatomy Laboratory and teaching facilities.

DUKE UNIVERSITY MEDICAL CENTER, Durham, North Carolina INSTRUCTOR, BIOMECHANICS, ORTHOPAEDIC SURGERY RESIDENCY

INSTRUCTOR, BIOMECHANICS, ORTHOPAEDIC SURGERY RESIDENCY 7/1980 to 7/1981 Teaching and research responsibilities for Orthopaedic Surgery Residency Program, Biomechanics Laboratory and teaching facilities.

WASHINGTON UNIVERSITY MEDICAL CENTER, St. Louis, Missouri ORTHOPAEDIC SURGERY RESEARCH LABORATORY ASSOCIATE

Biochemistry, Histochemistry, Metalurgical, Biomechanical research laboratory work with animal research studies pertaining to Orthopaedic applications in the area of bone, tendon, ligament, muscle and cartilage metabolism, growth, repair, regeneration and surgical techniques.

7/1981 to 7/1982

1/1981 to 4/1981

Summers 1969 to 1972

Page 2 of 15

1/1985 to 3/2010

7/1982 to 7/1983

7/1980 to 7/1982

7/1983 to 1/1985

WILLIAM O. REED, JR., MD, MBA, FAAOS

EDUCATION

High School:	1965-1968 The John Burroughs School, St. Louis, Missouri	
Undergraduate:	1968-1973 University of Rochester, Rochester, New York B.A. Chemistry B.A. Biology	
Post-Graduate Studies:	1973-1974 Washington University, St. Louis, Missouri Graduate Study, Department of Anatomy	
Medical School:	1974-1977 University of Missouri-Columbia Medical School, Columbia, Missouri Medical Doctorate Degree	
Graduate School: MBA	2010-2011 Olin School of Business Washington University in St. Louis Masters of Business Administration Degree #2 eMBA program worldwide (2011 WSJ rating)	
Residency:	1977-1979 Resident, General Surgery University of Missouri-Columbia Medical Center, Columbia, Missouri Ellis Fischell State Cancer Hospital, Columbia, Missouri Harry S. Truman Memorial VA Hospital, Columbia, Missouri	
	 1979-1982 Resident, Orthopaedic Surgery Duke University Medical Center, Durham, North Carolina Durham County General Hospital, Durham, North Carolina Womack Army Community Hospital, Fort Bragg, North Carolina Cabarrus Memorial Hospital, Concord, North Carolina Durham VA Medical Center, Durham, North Carolina Lenox Baker Children's Hospital, Durham, North Carolina 	

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	1982-1983 Chief Resident, Orthopaedic Surgery Duke University Medical Center, Durham, North Carolina Durham VA Medical Center, Durham, North Carolina Durham County General Hospital, Durham, North Carolina
HONORS AND AWARDS	
	Dean's List, University of Rochester, 1968, 1971, 1972, 1973
	Best MBA Team Member Award Olin Business School, Washington University in St. Louis 2011
MILITARY SERVICE	
Branch:	United States Air Force Induction: 1977 Missouri Air National Guard 133 rd ANG TAC Hospital Lambert International Airport, St. Louis, MO 1977-1979
Rank:	Major
Designation:	Flight Surgeon Brooks USAF Medical Center, Flight Surgeon School, San Antonio, TX
Assignments:	1977-1979 MO ANG 133 rd TAC Hospital St. Louis, MO
	1979 – 1983 Flight Surgeon USAF Reserve 4 th Fighter Wing Seymour-Johnson AFB North Carolina
	1982-1983 Womack Army Hospital, Orthopaedic Surgery Department Pope Air Force Base & Ft. Bragg, North Carolina Consultant, 1982-1983

WILLIAM O. REED, JR., MD, MBA, FAAOS

1983-2000

Flight Surgeon USAF Reserves Denver, CO

1999-2000

Regional Flight Surgeon, USN Blue Angels

2001

Honorable Discharge, United States Air Force

LICENSURE

Active:

State of Kansas	20072
State of Missouri	R8823
State of Florida	ME121898
State of Illinois	036139751
State of California	G 173290
State of Georgia	89859

Inactive:

North Carolina 25075

ACADEMIC APPOINTMENTS:

1984 to 1997 Clinical Assistant Professor Department of Orthopaedic Surgery University of Kansas Medical Center Kansas City, KS

CERTIFICATION

Certificate of Added Qualification in Surgery of the Hand, January 1989 Re-Certification awarded, C.A.Q. in Surgery of the Hand, January, 2000 Re-Certification awarded, Subspecialty Certificate , Surgery of the Hand, September, 2011 Board Certified, American Board of Orthopaedic Surgery, July 1985 Fellow, American Academy of Orthopaedic Surgery, February 1988 Advanced Cardiac Life Support, July 2002

PROFESSIONAL SOCIETIES

American Medical Association Duke Hand Society Founder's Circle, American Society for Surgery of the Hand Piedmont Orthopaedic Society Kansas Medical Society American Academy of Orthopaedic Surgeons International Society for Minimally Invasive Surgery of the Spine North American Spine Society American College of Healthcare Executives

GRANTS HELD

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Sutter Biomedical, San Diego, California, "Two-Stage Anterior Cruciate Ligament Prosthesis Project," William O. Reed, Jr., M.D. and Frank H. Bassett, III, M.D. Division of Orthopaedic Surgery, Duke University Medical Center, Durham, North Carolina, \$15,000, 1981-present.

Piedmont Orthopaedic Society, "Use of Impedance Monitoring to Detect Articular Cartilage Perforation During Metallic Implementation Near Joints," William O. Reed, Jr., M.D., Division of Orthopaedic Surgery, Duke University Medical Center, and James H. McElhaney, Ph.D., Department of Biomedical Engineering, Duke University, Durham, North Carolina, \$1,000, 1982-present.

MEDICAL INDUSTRY RELATIONS

Design and Clinical Consultant, Durr-Fillhauer Company, Project: Durr-Fillhauer Halo-Vest Cervical Spine Immobilization System
Physician Design Team; Choice Spine, Knoxville, TN; Typhoon Minimally Invasive Lumbar Facet Screw, Implant Design, Instrumentation and Technique
Investigator: Zimmer Spine; Dynesys Lumbar Dynamic Stabilization Implant System
Investigator: Surgical Dynamics: Laparoscopic and Thoracoscopic Discectomy, TFC Cage Fusion, Lumbar and Thoracic Spine.
Board Member; Invicta Medical; San Jose, CA

MISCELLANEOUS

Licensed Airline Transport Pilot, Federal Aviation Administration Certified Flight Instructor, Inactive Senior Airman Medical Examiner, Federal Aviation Administration

SCIENTIFIC EXHIBITS

William O. Reed, Jr., M.D., William T. Hardaker, Jr., M.D., Frank W. Clippinger, M.D., David W. Vaughn, C.P.O: <u>Application of the Halo-Vest Cervical Spine</u> <u>Immobilization System Using the Duke Halo Positioner</u>. Videotape, AAOS Library

SCIENTIFIC PRESENTATIONS, NATIONAL AND REGIONAL MEETINGS

- 1. Reed, William O., Jr., M.D.: Limb Trauma and Salvage for Reimplantation and Reconstructive Microsurgery. Midwest Trauma Society Eleventh Annual Midwest Trauma Conference, May 16, 1997.
- 2. Reed, William O., Jr., M.D.: Surgical Treatment of Cubital Tunnel Syndrome: A New Surgical Procedure Utilizing Intermuscular Septum Flap Transfer. Duke Hand Club Meeting, The Cloister, Sea Island, GA, May 8, 1997.
- 3. Reed, William O., Jr., M.D.: Endoscopic Carpal Tunnel Release: Results of Office Surgery Experience. Piedmont Orthopaedic Society, May 5, 1995, Georgia.
- 4. Reed, William O., Jr., M.D.: Office Arthroscopic Surgery of the Knee: Results of Three Years' Experience. Piedmont Orthopaedic Society, May 6, 1995, Georgia.

WILLIAM O. REED, JR., MD, MBA, FAAOS

- 5. Reed, William O., Jr., M.D.: Arthroscopic Microdiscectomy of the Lumbar Spine. Piedmont Orthopaedic Society. May 16, 1996, Tucson, Arizona.
- 6. Reed, William O., Jr., M.D.: Current Methods of Cervical Spine Immobilization, The North Carolina Society of Prosthetists and Orthotists, April 18, 1982, Chapel Hill, North Carolina
- 7. Reed, William O., Jr., M.D.: Application of the Halo-Vest System, Videotape presentation and discussion.
- Reed, William O., Jr., M.D.: "Review of Minimally Invasive Spine Surgery Results; Arthroscopic Microdiscectomy and Laparoscopic Interbody Fusion With Video Tape", Piedmont Orthopaedic Society Meeting, The Cloister, Sea Island, GA, May 1999.
- 9. Reed, William O., Jr., M.D.: "Subcutaneous Transposition of the Ulnar Nerve Using Intramuscular Septum Technique", Piedmont Orthopaedic Society, The Cloister, Sea Island, GA, May 1997
- 10. Reed, William O., Jr., M.D.: "Results of 142 Patient Experience with Intradiscal ElectroThermal Therapy (IDET)": NASS Poster Exhibit, 2004
- Reed, William O., Jr., M.D.: "Implantation of Lumbar TDR Challenges, Complications and Solutions": First Annual Aesculap TDR Summit; Del Frisco's, 250 Northern Ave., Boston, MA, 250ct2016
- 12. Reed, William O., Jr., M.D.: "Chronic Low Back Pain: Treatment Options and Supporting Clinical Evidence": Case Management Society of America Kansas City Chapter, Lydia's Restaurant Banquet Room, Kansas City, MO. 02Nov2017
- 13. Reed, William O., Jr., M.D.: "Why I Choose Anterior Lumbar Motion & Fusion" Aesculap National Educational Sales Meeting, Woodlands, Houston, Texas. 20Jan2018
- 14. Reed, William O., Jr., MD: activL® Artificial Disc Replacement: Atlanta Spine Society Meeting, Atlanta, Georgia, 27Mar2018
- Reed, William O., Jr., M.D.: "Avoiding Complications Related to Lumbar Total Disc Arthroplasty; Candidacy Through Follow-Up" Second Annual Lumbar Total Disc Replacement Summit, Texas Back Institute, Dallas, Texas – May 19th and 20th, 2018
- 16. Reed, William O., Jr., MD BackerNation's Back Talk Series: Lumbar Artificial Disc Replacement: I've Been Told I Need a Fusion, Am I a Candidate? Live Webinar; 15Apr2019
- Reed, William O., Jr., MD Lumbar Motion Preservation Today: Practice Evolutions: Surgeon Introductory Course, Nebraska Spine and Pain Center, 13616 California St # 100, Omaha, NE 68154; April 16, 2019
- Reed, William O., Jr., MD "Endplate Classification & Fixation Case Study"; Panelist, Case Presentations; Fourth Annual Aesculap TDR Summit; Zia II at the Kimpton Hotel Palomar, Phoenix, AZ. 1-2 June, 2019
- Reed, William O., Jr., MD: Advances in Cervical and Lumbar Total Disc Replacement Arthroplasties;
 15 year experience and evolution. Duke Hand Society Triennial Meeting, Gleneagles Hotel,
 Auchterarder, Perthshire, Scotland PH3 1NF; 24Jul2019

WILLIAM O. REED, JR., MD, MBA, FAAOS

- 20. Reed, William O., Jr., MD: Complex Lumbar Total Disc Replacement Discussion; Case Presentation, Riva Crabhouse, Chicago, IL 12Nov2019
- Reed, William O., Jr., M.D.: "Motion Preservation vs. Spine Fusion Today: Paradigm Evolution in Spine For Workers, Employers & Insurers": IAIABC 105th Convention, (The International Association of Industrial Accident Boards and Commissions): Pittsburgh, PA, 21-24Oct2019

INSTRUCTIONAL COURSE AND LABORATORY AS FACULTY

- Reed, William O., Jr., M.D.: Inflatable Bone Tamp Uses in Cancellous Bone. Instructional Course and Cadaver Laboratory, Spine Education and Research Institute, Denver, CO., February 28th, 2003
- Reed, William O., Jr., M.D.: Inflatable Bone Tamp Uses in Cancellous Bone. Instructional Course and Cadaver Laboratory, Washington University School of Medicine, St. Louis, MO., October 19th, 2002
- Reed, William O., Jr., M.D.: Inflatable Bone Tamp Uses in Cancellous Bone. Instructional Course and Cadaver Laboratory, Oklahoma City Specialty Hospital, Oklahoma City, OK, July 12, 2002.
- 4. Reed, William O., Jr., M.D.: Surgical Treatment of Cubital Tunnel Syndrome: A New Surgical Procedure Utilizing Intermuscular Septum Flap Transfer. Duke Hand Club Meeting, The Cloister, Sea Island, GA, May 8, 1997.
- 5. Reed, William O., Jr., M.D.: Endoscopic Carpal Tunnel Release: Results of Office Surgery Experience. Piedmont Orthopaedic Society, The Cloister, Sea Island, Georgia, May 5, 1995
- 6. Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Plano, TX; 6-7Oct2017. Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- 7. Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Oklahoma Spine Hospital, Oklahoma City, OK; 17Nov2017. Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- 8. Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Phoenix,AZ 24Feb2018 Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- 9. Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Henderson, NV; 02Nov2018. Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
 - a. The activL Artificial Disc IDE Outcomes: 2 and 5 Years Dr. Avoiding Complications in Lumbar Arthroplasty Dr. Reed
 - b. Differentiating Your Practice with Disc Replacement Dr. Reed
- 10. Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Atlanta, GA 4May2019 Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR

WILLIAM O. REED, JR., MD, MBA, FAAOS

- 11. Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Science Care, 19301 E. 23rd Avenue, Aurora, CO; 27Apr2019. Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Crestwood Medical Center, One Hospital Drive SE, Huntsville, AL 35801; May 17, 2019; Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- Reed, William O., Jr., M.D.: Lumbar Motion Preservation and Fusion Today: Practice Evolution: Pacific American Life Science Learning Center, 5286 Eastgate Mall, San Diego, CA 92121; 20Jul2019 Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- Reed, William O., Jr., M.D.: Lumbar Motion Preservation & Fusion Today: Practice Evolution: AIME: Atlanta Institute for Medical Education, 1661 Defoor Ave NW, Atlanta, Georgia 30318, June 13, 2020: . Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- Reed, William O., Jr., M.D.: activL® Artificial Disc: Spine Surgeon Credentialing Opportunity: August 22, 2020.Mast Labs, 6400 Goldsboro Rd., Bethesda, MD 20817; Instructional Course and Cadaver Lab Training for 6 Spine Surgeons, sole Faculty
- Reed, William O., Jr., M.D.: Lumbar Motion Preservation & Fusion Today: Practice Evolution: Cadaver Labs USA, 4590 Lockhill Selma, Suite 101, San Antonio, TX 78249, April 17th, 2021: Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- Reed, William O., Jr., M.D.: Lumbar Motion Preservation & Fusion Today: Practice Evolution: EXCELEN Center for Bone and Joint Research and Education, 700 10th Ave S, Minneapolis, MN 55415, May 7, 2021: Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
- Reed, William O., Jr., M.D.: Lumbar Motion Preservation & Fusion Today: Practice Evolution: Orthopaedic Foundation Bioskills Lab: 345 E 37th St #312, New York, NY 10016, May 2, 2021: Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
 - Reed, William O., Jr., M.D.: Lumbar Motion Preservation & Fusion Today: Practice Evolution: National Bioskills Laboratories: 1601 Lyndon B Johnson Fwy #100, Farmers Branch, TX 75234, November 13, 2021: Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR
 - Reed, William O., Jr., M.D.: Lumbar Motion Preservation & Fusion Today: Practice Evolution: Christus St. Patrick Hospital, 524 Dr. Michael DeBakey Drive, Lake Charles, LA 70601 November 16 2021: Sole Faculty, Lecture and Cadaver Labs for surgeon training, exposure and implantation of ActivL TDR

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INSTRUCTIONAL COURSE AND LABORATORY ATTENDED

Certificate of Recognition: The BAK Lumbar Interbody Fusion System Lumbar Interbody Fusion of the Spine Course Kansas City, KS February 1, 1997

Charite Lumbar Total Disc Arthroplasty Implantation - 2004

ProDisc Lumbar Total Disc Arthroplasty Implantation - 2006

Mobi-C 2008

ActivL 2015

ProDisc-C 2014

M6 Cervical Total Disc Arthroplasty 2017

Kyphoplasty Inflattable Bone Tamp and Cement Fixation - 2008

Intradiscal ElectroThermal Therapy – 2001

Anterior Lumbar Interbody Fusion Approach and Techniques - 1994

BIBLIOGRAPHY

Reed, William O., Jr.: Persistence of Fetal Tropomyosin as a Model for the Pathogenesis of Duchenne's Muscular Dystrophy, (Departmental paper, not published), Department of Genetics, University of Rochester Medical School, Rochester, New York.

Reed, William O., Jr.: Disc Electrophoresis of Human Tropomyosin Molecule from Adult, Fetal, and Duchenne's Muscular Dystrophy Muscle, Department of Genetics, University of Rochester Medical School, Rochester, New York.

Daffner, Richard H., and Reed, William O., Jr.: Radiographic Findings After the Macquet Procedure for Chondromalacia Patella. In preparation.

Reed, William O., Jr., Ruderman, Robert J., and McCollum, Donald E.: Cadaveric Tibial Strut Grafting in Treatment of Kyphosis. In preparation.

Reed, William O., Jr., Vaughn, David W., Hardaker, William T., Jr., and Clippinger, Frank W.: "Halo Application Using the Duke Halo Positioner", JAAOS, published 1984.

Michael Janssen, DO, Rolando Garcia, MD, Lynn Miller, DO, William Reed, MD, Jack Zigler, MD, FACS, N. Ferko, and Sarah Hollmann: "Challenges and Solutions for Lumbar Total Disc Replacement Implantation" SPINE Volume 42, 2017

Braxton E Jr, Wohlfeld BJ, Blumenthal S, Bozzio A, Buttermann G, Guyer R, Idema J, Laich D, Morreale J, Nikolakis M, Patel A, Price JS, Witt JP, Zigler J, Martin M. Postoperative Care Pathways Following Lumbar Total Disc Replacement: Results of a Modified Delphi Approach. Spine. 44 (Suppl 24):S1-S12, 2019.

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INVESTIGATIONAL STUDY PARTICIPATION

- 1. Laparoscopic Lumbar Anterior Interbody Fusion, Surgical Dynamics: FDA IDE study for Ray Threaded Titanium Interbody Cages, Laparoscopic Insertion Instrumentation and Techniques
- 2. "Dynesys" Dynamic Pedicle Screw and Flexible Kevlar Rod Lumbar Stabilization System: Zimmer Orthopaedics, FDA IDE study for Dynamic Flexible Rod Instrumentation System
- **3.** Lateral Lumbar Interbody Total Disc Arthroplasty System, Pioneer Surgical; FDA IDE study for laterally inserted PEEK interbody artificial disc arthroplasty device.

CURRENT ACTIVE STAFF APPOINTMENTS

Shawnee Mission Medical Center, Merriam, KS

Menorah Medical Center (HCA), Overland Park, KS

Minimally Invasive Surgery Hospital Lenexa, KS

Midwest Orthopaedic Network Surgicenter 6500 W 143rd St, Overland Park, KS 66223

WILLIAM O. REED, JR., MD, MBA, FAAOS

EXECUTIVE PROFESSIONAL EXPERIENCE

IATRICORP LLC

Parent organization coordinating the activities of two subsidiaries: IATRIX, which is an algorithm driven accelerated cash flow platform for healthcare entities of all types, and IATRICOMP, providing healthcare entities with algorithms for predicting cash flow as well as big data analysis, actionable data insight, artificial intelligence, process automation and predictive analytics. 6/2018 to PRESENT

FOUNDER & CHAIRMAN OF THE BOARD, PRESIDENT

- Established partnership with TeraCrunch LLC for big data analytics, algorithm applications and artificial intelligence programming.
- Established financial source relationships to support accelerated cash flow program. •
- Established accounting services to service client accounts •
- Authored marketing materials for direct, web-based and conference based opportunities. •
- www.iatrix.com

PINNACLE HEALTHCARE DEVELOPMENT INTERNATIONAL, LLC

The experience of Partners Healthcare and the movement politically in healthcare led to the dissolution of Partners and forming a new entity with a business plan more adapted to the present and future healthcare political and fiscal realities. FOUNDER & CHAIRMAN OF THE BOARD, PRESIDENT 1/2012 to PRESENT

- Assembled experienced principals to form core of PHD corporate structure
- Managing board with all members active in daily activities surrounding acquisition target identification, evaluation, and due diligence of community, medical staff opportunities, syndication potential, funding sources, political considerations, competitive factors, local, state and national legislative factors, partnership opportunities, employer base, commercial insurance contract access and rates, physical plant assessment, environmental impact, tax basis, outstanding legal issues, operational concerns, lease and loan obligations, and other contractual obligations.
- PinnacleHD is currently involved in selectively pursuing acquisitions with debt and equity partners within the acute care hospital realm.

CASE MANAGEMENT SOCIETY OF AMERICA MEDICAL DIRECTOR, ADVISORY BOARD MEMBER, MISSOURI/KANSAS CHAPTER

Innovative position, elected to by CMSA Board to give physician and political advice and counsel to nurse case managers in matters of disability, workers compensation, rehabilitation, and catastrophic injury care. www.cmsa.org

KCDOCS4U

ACCOUNTABLE CARE ORGANIZATION AND IPA EXECUTIVE DIRECTOR, FINANCE COMMITTEE MEMBER

KCMPA-ACO Kansas City Metorpolitan Physicians Association undertook a successful effort to organize, obtain and expend federal funds to create Kansas City's first ACO (Accountable Care Organization) under the rules created by the Health and Human Services branch of the Federal Government.

PARTNERS HEALTHCARE DEVELOPMENT INTERNATIONAL, LLC

A start-up healthcare business organization based upon several simultaneously executable business plans regarding hospital facility acquisitions, pursuing the establishment of a successful hospital system dedicated to helping preserve physician independence and quality of cost effective care. PHD plans to always retain majority facility ownership, but depending upon market conditions, execute physician employment, physician syndication, or a blend. Target hospitals for acquisition will be 20 to 300 bed facilities in either competitive metropolitan areas or rural settings that geographically satisfy and support the business plan. Principals bring together an experienced leadership team with expertise in the successful development, operation, and political realities pertaining to health care. A business plan based upon diversity of opportunities supported by the ability to anticipate and preemptively react to a changing healthcare landscape supports growth, sustainability, and investment security for PHD.

FOUNDER & CHAIRMAN OF THE BOARD

Page 12 of 15

1/2013 to 12/2017

11-2012 to 12/2017

5/2006 to 12-2011

WILLIAM O. REED, JR., MD, MBA, FAAOS

- Assembled principals with like ideals and aspirations to form core of PHD corporate structure
- Created corporate documents and required filings to formalize corporate creation.
- Designed website, logo, naming.
- Managing board with all members active in daily activities surrounding acquisition target identification, evaluation, and due diligence of community, medical staff opportunities, syndication potential, funding sources, political considerations, competitive factors, local, state and national legislative factors, partnership opportunities, employer base, commercial insurance contract access and rates, physical plant assessment, environmental impact, tax basis, outstanding legal issues, operational concerns, lease and loan obligations, and other contractual obligations.

CITIZENS HEALTH CARE ASSOCIATION

This 501(c)-3 not-for-profit political organization came to serve more and more the acute political needs and access desires of physician owned facilities like Heartland, generating an alliance with and reliance upon this organization. volunteer position dedicated to furthering the political exposure of independent entrepreneurial physicians on behalf of their patients' needs. Specifically, CHCA set the goal of presenting factual information supporting the opposing opinion to the American Hospital Association and many state hospital associations who had set out to legislatively forbid physician ownership of hospital facilities. CHCA completed its mission successfully, dissolving officially in May of 2007.

VICE-CHAIRMAN

- At first an active member, then later appointed and accepted Vice-Chair position of CHCA •
- A volunteer position involved in organizing and disseminating critical information to state and federal legislators, and federal administration key individuals.
- Organized fund-raising activities for various candidates who represented independent physician ideals. 5/2005 to 5/2007

CHAIRMAN OF THE BOARD

- Advanced to Chairman by the Board.
- Testified before the US Congress MEDPAC Committee regarding physician ownership in hospitals
- Continued fund-raising and educational encounters for members of congress regarding physician owned hospital.

HEARTLAND SPINE & SPECIALTY HOSPITAL CHAIRMAN OF THE BOARD

- Led active managing board, devoting minimum twenty hours per week to duties of this position in addition to • an active surgical practice
- Remained the number one contributor of surgical cases to HSSH, setting example of successful patient • steerage to facility despite managed care challenges.
- Organized sub-committees serving the needs of the Board under select circumstances. •
- Led search committees for critical employee replacement needs when necessary •
- Personally read, red-lined, and negotiated all managed care contracts and vendor contracts. •
- Personally and actively participated in workers compensation provider marketing efforts. •
- Personally subscribed additional medical staff members in support of hospital specialist needs. •
- Under my leadership, hospital has achieved the status of a successful, profitable, and politically engaged health care facility with unprecedented quality indicators.
- Grew hospital from opening to over \$100 M yearly revenue organization within 5 years.
- Coveted Press-Ganey "SUMMIT" award winner for 3 continuous years greater that 95% patient satisfaction

rate. CHIEF EXECUTIVE OFFICER

Served in capacity of CEO for hospital while leading search for new hire in this position. Assumed all duties of CEO administratively, leading weekly managers' meetings.

9/2003 to 12/2008

1/2004 to 5/2005

10/2004 to 9/2005

WILLIAM O. REED, JR., MD, MBA, FAAOS

HEARTLAND SURGICAL SPECIALTY HOSPITAL, LLC

Physician owned corporation dedicated to construction and operation of a "Center of Excellence" surgical hospital emphasizing multi-disciplinary care of Upper Extremity and Spine surgical patients. Orthopaedic Surgeons, Neurosurgeons, Pain Management, General and Vascular Surgeons, Plastic Surgeons formed initial core investor group. FOUNDER, PRESIDENT & CHIEF ADMINISTRATIVE OFFICER 7/2000 to 9/2003

- Founder, visionary and organizer of physician investment opportunity based upon concepts of "Center of Excellence" care structures studied at Duke Medical Center, and principals of inter-specialty collegiality and cooperation observed in the armed services medical systems.
- Original proposals to for-profit and not-for profit Metro health systems for partnership never matured, thus • project personally pursued successfully without established hospital partnership.
- Organized and led all investor meetings, personally investing in and bringing together consultants with expertise in real estate, accounting, facility architecture, construction, legislative and regulatory matters, legal, and equipment purchasing.

VP OF FINANCE

7/2000 to 9/2004

7/2000 to 6/2004

7/2000 to 9/2003

- Personally acquired needed financing for tenant improvements related to hospital interior build-out. Acquired temporary financing for all hospital equipment and supplies.
- Negotiated line of credit for critical hires needed to initiate hospital operations seamlessly upon state • certification.
- Acquired and negotiated final three-part loan package with single debt-equity partner, secured all guarantees • and taking out temporary construction loan participants.
- Have continued to competitively bid and re-negotiate debt covenants and terms, gradually reducing guarantees, loan principals, interest rates.

VP OF INVESTOR RELATIONS

- Syndication organization for physician investors.
- Observance and monitoring of process to accurately identify qualified investors as required for SEC compliance.
- Personally attracted and met with all potential physician investors with high rate of closure.

VP OF CONSTRUCTION

- Active in architectural design phase, merging clinical "Center of Excellence" design criteria into blue-prints for model surgical inpatient facility. Met with City Council and Zoning Commission to acquire all needed permits and permissions for hospital structure and site plan approvals. Met as needed with Kansas State authorities regarding health care facility approval and inspection requirements. Attended and led multiple weekly construction meetings with general contractor and all relevant subcontractors. Personally performed or attended all construction walk-throughs for plumbing, electrical, drainage, equipment location, IT configuration, security installation, fire and safety, HVAC, isolation.
- Saved over \$2.5 M in construction costs by executing Phase II of site plan earlier than expected.
- Investigated and selected all equipment and technology incorporated into Metro's first all digital hospital radiology department and digital operating room environments.

VP OF OPERATIONS

- Led successful efforts in securing outstanding staff filling all positions serving the hospital's initial needs.
- Personally selected and trained initial hospital CEO, CFO, CNO, IT Manager, OR Director, HR Manager, Medical Records Manager, Business Office Manager, and Marketing Director.
- Located and secured off hospital but adjacent office space for remote business office serving hospital's needs. •
- Secured successful opening of hospital with state inspection registering "zero deficiencies."
- First JCAHO inspection gained accolades by being the earliest successful JCAHO review in the Metro after opening.
- JCAHO then granted an unprecedented three year certification interval, unheard of for a new institution. • Contracted for all third party supplies and services for hospital.
- Led and successfully survived cash flow challenges presented by managed care exclusionary practices. ٠
- Bridge Plan initiation and compliance monitoring to assure fiscal responsibility and updating proforma modeling accordingly.

7/2000 to 9/2003

WILLIAM O. REED, JR., MD, MBA, FAAOS

• Led a successful challenge to managed care exclusionary practices through a successful filing and litigation under the Sherman Anti-Trust Act.

Prepared experts, prepared witnesses, gave testimony and survived the perilous hurdle of Summary Judgment, leading to satisfactory but undisclosable settlement with defendants.

ADVANCED SPINE AND ORTHOPAEDIC SPECIALISTS, P.A. <u>PRESIDENT/CEO</u>

Expansion of Heartland Hand & Spine Orthopaedic Center, P.A. with added sports medicine fellowship trained orthopaedic surgeon, on site pain management anesthesiologist and injection suite, physiatrist and board certified electromyographer dictated a corporate name change to reflect the expanded services now available at the same familiar location. Practice then sold to hospital entity, Dr. Reed remained independent entering solo practice again.

HEARTLAND HAND & SPINE ORTHOPAEDIC CENTER, P.A. *PRESIDENT/CEO*

Founder of Orthopaedic Spine and Upper Extremity sub-specialty medical practice in prestigious and competitive Johnson County, Kansas. Built the solo practice into a six practitioner thriving and respected destination for Upper Extremity and Spine total care.

- First in the Metro to offer all digital radiography
- First in the Metro to offer Minimally Invasive Upper Extremity surgical techniques.
- First in the Metro to offer Minimally Invasive Spine surgical techniques.
- FDA investigators for Laparoscopic Spine Fusion techniques and technology
- Active Spine Fellowship Training Program

JOHNSON COUNTY REHABILITATION ASSOCIATES, LLC; Overland Park, KS

dba, Mid-America Rehabilitation Hospital, Overland Park, KS

MANAGING PARTNER

Administrative and contributing surgeon in support of 80-bed rehabilitation inpatient and outpatient hospital facility and program development, budget management, equipment, supply acquisition, quality improvement and ongoing operations

- Development of Spine Surgery specialty rehabilitation programs.
- Development of Upper Extremity and Microsurgery rehabilitation programs
- Development and support of physician syndication opportunity program
- Consulting Medical Staff Member, Orthopaedic Surgery, Spine, & Hand Surgery

SHAWNEE MISSION SURGERY CENTER, LLC; Merriam, KS

For-Profit Out-Patient Surgery Center division of not-for-profit Shawnee Mission Medical Center, Adventist Health Care System..

MANAGING PARTNER

Administrative and contributing surgeon in support of four-operating room surgicenter development and ongoing operations.

- Development of Arthroscopic Surgery specialty program.
- Development of Upper Extremity and Microsurgery programs

JOHNSON COUNTY SURGICENTER, LLC; Overland Park, KS

Division of Columbia-HCA, Inc.,

MANAGING PARTNER

Administrative and contributing surgeon in support of six operating room surgicenter development, budget management, equipment, supply acquisition, quality improvement and ongoing operations

- Development of Arthroscopic Surgery specialty program.
- Development of Upper Extremity and Microsurgery programs
- Development of Out-Patient, Minimally Invasive Spine Surgery program,
- Investigator of Arthroscopic Micro-Discectomy surgical techniques.

1/1985 to 12/1987

1/1987 to 4/2001

1/1988 to 4/2005

4/2010 TO 5/2011

7/1983 to 5/2011