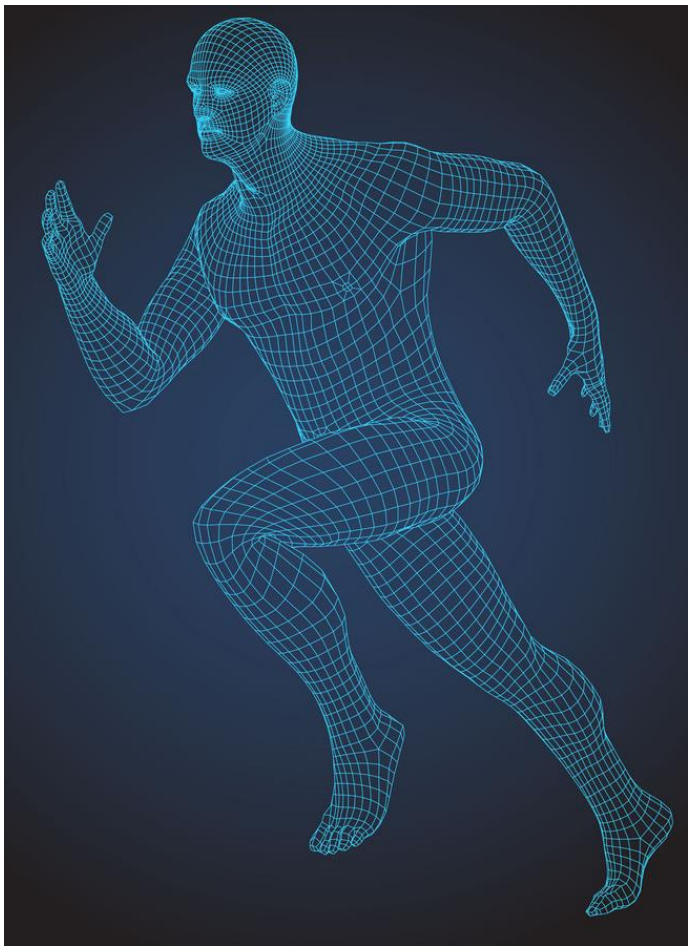


MILITARY READINESS ATLAS ORTHOGONAL CARE

Chiropractic Specialty, A.O.C.C.

ABSTRACT

The brain stem controls 100% of muscle tone and balance, here lies the cause of lumbago and muscle spasms, impeding mission readiness. A.O.C.C. is non-invasion approach to keeping the spine aligned to maintain human performance or expedite healing.

Mark A. Pierce, DC, AOCC
Dorette Nysewander, EdD, “DrD”
Every Commands Secret Weapon

Atlas Orthogonal Chiropractic Care (AOCC) is a subspecialty making significant impact in health and human performance with supporting research and practical applications within clinical settings. Currently, chiropractors (DCs) are providing care in 65 military treatment facilities both CONUS and OCONUS[1], however, no AOCCs. While the focus of this white paper focuses on Special Forces Operators, AOCC is a recommended practice for all military personnel.

Physical Healthcare of Jacksonville [PHJ] and D Group Consulting Services Inc. [D Group] have provided the military with objective statistical data, reduction in treatment time and increased health improvements for patients of AOCC regarding physical performance, injury, rehab, and sleep. These are similar attributes for the U.S. SOCOM Preservation of the Force and Family (POTFF) - Human Performance Program. Despite significant study of injury epidemiology in U.S. military personnel,[2] [(1,–5)] there is limited published data describing injury patterns of U.S. Special Operations Forces (SOF).[2] [(6,–9)]

The U.S. Army has released a vision of Holistic Health and Fitness (H2F) for Soldier Lethality. This vision aligns with U.S. Army Human Dimension Concept paper published in 2014.[3] H2F encompasses physical, mental, and spiritual readiness along with nutritional performance and sleep hygiene. In our opinion the Army has it right, as this holistic model is a system of integrating subject matter experts for the optimal health and well-being of the Soldier's individualized needs. The latest cost estimates reported are $560 million specific to musculoskeletal injuries[4] (McGurk, April 2019).

Reviewers will find this document leads with four pages of insights on AOCC and follows with five pages of known research. Thank you for your interest and let us know how we can assist you further.

Mark Pierce, D.C., B.C.A.O.
Dorette Nysewander, EdD, "DrD"

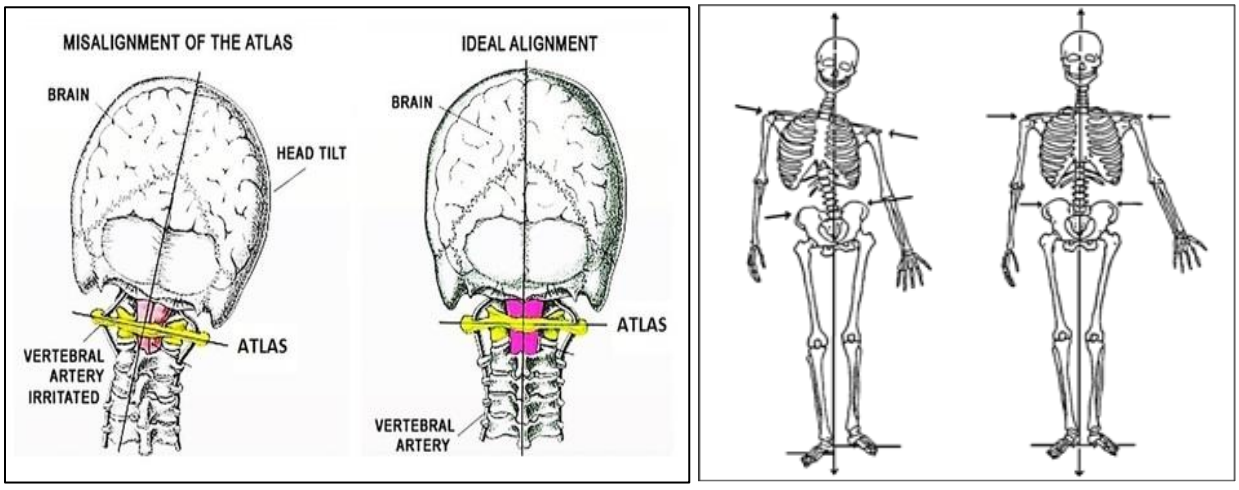
INTRODUCTION

Upper Cervical Low Force adjusting. Upper Cervical Low Force (UCLF) is the general category description for the adjustment of the Atlas. The Atlas is a 2-ounce vertebra at the top of the spine where the head sits. When the atlas is misaligned, it negatively affects the vertebral artery [blood supply to 75% of the brain], while causing irritation to the vital nerves traveling through the entire body directly impacting health (View video: An Atlas Orthogonal Introduction).[5]

What is atlas orthogonal care and why should the U.S. Armed Forces consider it? The cost to train a special forces operator to full capability is exponentially higher than general purpose forces. For this reason, the associated cost and mission impact to physical related down time for Special Operators is also exponentially higher. The Atlas Orthogonal Technique is a non-manipulative approach to chiropractic care focusing on aligning the first bone in the spine---the atlas. With proper alignment of the atlas bone the spine remains stable and allows the body to maintain health or heal (The Joint Chiropractic, 2019).[6]

Operators can feel when their bodies are out of alignment, however having the right tool is often not known or unavailable. Think in terms of pinching off a garden hose, there may be some water that travels through the hose however it will not be a natural flow. This is what happens when the atlas is out of alignment and pinches the brain stem. Thus, the interruption of neural messages traveling from the command center [brain] resonating down the spine impedes health. The brain stem controls 100% of muscle tone and balance, **here lies the cause of lumbago** and muscle spasms (Pierce, 2019).[7]

The images below demonstrate the opportunity to set the body in the best position for health or to heal. This starts with the atlas shown through the second and fourth images from the left.



1 2 3 4

Alignment of the spine is emphasized as a baseline in setting up the body for health. However, to maintain overall physical shape constitutes the warfighter's participation in an active strength, cardiovascular and flexibility program for muscle and nerve balance. Our focus and goal with implementing atlas care and balanced exercise programming for U.S. SOCOM is to facilitate increased special operator health and wellness.

DISCUSSION

Within an "evidence-based" [proven] journal, the *Annals of Internal Medicine* pointed to spinal manipulation care as one of the major nonpharmacologic therapies considered effective for acute and chronic low back pain (LBP) without side effects.[8] This means less downtime for special operators or other personnel. More recently, research shows spinal manipulation for LBP is just as effective as a combination of medical care and exercise, and moderate evidence that it is just as effective as prescription NSAIDs combined with exercise.[9,10] An article published in the *Journal of the American Medical Association* in 2013 also suggested chiropractic care as an option for people suffering from LBP--and noted that surgery is usually not needed and should only be tried if other therapies fail.[11]

The military is the largest employer to the Jacksonville, FL community. In 30 years of clinical practice trends in care have resulted in AOCC making significant differences in the health of military personnel. AOCC care:

- initially focused on pain management, treatment of injuries and trauma, however in the last 20 years this has shifted to performance enhancement.
- is gaining popularity with Military Pilots, General Purpose Forces (GPF), and Special Forces Operators supporting specific physical demands due to its effectiveness.
- supports Navy, Air Force pilots with rebalancing the cervical spine due to the 30% angle of a fighter pilot's seat and G-forces placed on the neck.

The atlas is the "master control" bone influencing the other 23 vertebrae of the spine into a corrected position, allowing the nervous system to freely control and heal the body of pain. The chiropractor uses this technique to gently align the spine with no stress, making it safe for anyone. Treatment requires less frequency of care, reducing lost work time and health care costs (BMC, 2011).[12]

Dr. Pierce and PHJs objective insights, through results in patient health, believe that AOCC is the most effective chiropractic regimen. It quickly returns pilots to flight and ground forces back to mission "ready". As technology and practice guidelines evolve, so has the practice of AOCC.

Table 1 provides PHJ clinical statistics for the most recent 175 tri-care/military patients both active and retired. The data listed includes patients receiving AOCC treatment for one health concern and results of the outcome assessment.[13]

Outcome assessments are based on a patient interview and questionnaire to include the Oswestry Back and Neck Pain Assessment. These are standardized questionnaires that asks for the patient's improvements in pain, function, return to lifestyle (duty), in addition to what degree. Treatment plans can vary, 2-3 times per week up to 8 weeks based on the level of care needed. Factors influencing recovery can include, however not limited to: (a) the length of time the patient has had the problem, (b) patient's current level of health & fitness, (c) and the patient's compliance with treatment.

Table 1. Physical Healthcare of Jacksonville Trends and Data

Health Concern	Patients	Outcome Assessment
Back Pain	21	86.7%
Neck Pain	14	85.7%
Preventive Patient Care	140	Current Patients No acute episodes

Back Pain – 21 of the 175 patients with this diagnosis assigned had loss of proper *lumbar c*urvature, vertebral misalignment, injury, herniated disc or degenerative conditions. This caused trouble with walking, restrictions in movement - sitting, standing, lying down, or changing positions. Patients self-medicated using NSAIDs to try to feel better.

Neck Pain – 14 of the 175 patients with this diagnosis assigned experienced loss of proper *cervical* curvature (particularly fighter pilots), disc problems, vertebral misalignment, herniated disc, injury, and degenerative conditions. Patients complained of constant neck pain, movement restrictions or headaches.

Preventive Patient Care – 140 of the 175 are current patients within the PHJ practice. Patients have active lifestyles that require preventive measure to avoid relapse or exacerbation of a condition. None of these patients were in acute distress nor did they complete a patient interview or outcome assessment.

The data provided in Table 1, aligns to the references found in the research below to include:

- A single session of Chiropractic Manipulative Therapy (CMT) was shown to have an immediate effect of reducing the time required for asymptomatic SOF qualified personnel to complete a complex whole-body motor response task (Clinical Trials, 2019).
- Chiropractic care, when added to usual medical care, resulted in moderate short-term improvements in low back pain intensity and disability in active-duty military personnel (JAMA, 2018).
- A total of 130 U.S.A.F. Special Tactics Operators participated in the study (age: 29.1±5.2 years). The 1-year cumulative incidence of Musculoskeletal Injuries (MSI) was 49.2 injured Operators out of a 100 Operators per year (BMJ, 2018).

- Yoga-based interventions for chronic pain in military members and veterans (e.g., RESTORE) through military primary care clinics may provide benefit to service members with LBP and potentially enhance military readiness and resilience (ELSEVIER, 2018).
- Although the mechanisms of G-Forces induced stress on the spinal structure of military pilots are well understood, less is known about relationships between the intensity of physical activity, fitness, occupational musculoskeletal symptoms, and the degree of resulting disabilities (Military Medicine, 2015).
- Spinal, hip, and shoulder pain patients had clinically similar pain relief, greater satisfaction levels, and lower overall cost if they initiated care with chiropractors [DCs], when compared with those who initiated care with MDs (Pub Med, 2015).
- Study demonstrates the importance of optimizing knee-extension strength, trunk strength, and knee position on landing to prevent musculoskeletal injuries in U.S. Army SOF Operators. Findings also include the need for individualized screening and training that focus on identifying and correcting musculoskeletal and performance deficits relative to peers (Journal of Athletic Training, 2014).
- The typical routine chiropractic adjustment program requires 7-8 total adjustments, costing 44% more in time and care compared to UCLF (BioMed Central, 2011).
- Complementary health therapies, including spinal manipulation, offer additional options to conventional treatments, which often have limited benefit in managing back and neck pain (AHRQ, 2010).

Developing customized injury prevention programs for SOF personnel reduces the burden and cost of MSIs. In review, there is repeated commentary on the need for further study.

SUMMARY

The body's focus is always to reset to good health. This necessitates having the right instrument or treatment. With the #1 health diagnosis for Special Operators being Lumbago (MacDill HAWC, 2018)[14], evidence-based commentary has provided one solution --- Atlas Orthogonal Chiropractic Care. Personnel in the best of physical shape make demands on their bodies during missions and trainings that often cause scalability of back pain from minor irritation to disability. While aspects of physical conditioning are of utmost importance, understanding body signals for assistance lies in the adjustment of the atlas to maintain nerve and muscular balance with the sustainability for overall good health. By keeping the atlas in alignment, coupled with other lifestyle care, personnel will continue being resilient and mission ready.

RESEARCH ABSTRACTS

Below is a cross-section of research study abstracts assembled into the categories to include, assessment, physical performance, injury rehab, sleep, and blood pressure. While benefits of chiropractic care have been recognized in research and implemented on military bases, to date there is nothing in peer-reviewed journals on sustained AOCC for SOF or any elite forces.

ASSESSMENT

Chiropractic care was first known in 1895. AOCC as a specialty was introduced in the 1920s. With Dr. Sweat's influences in the 1950s, AOCC became a non-manipulative approach to care. As with all specialties, advancements in care focuses on less treatment to produce greater patient healing and recovery. According to the National Institutes of Health, National Center for Complementary and Integrated Medicine, the American College of Physicians and the American Pain Society stated in the 2007 guidelines to include spinal manipulation as one of several treatment options for practitioners to consider when low-back pain does not improve with self-care.
REF: https://nccih.nih.gov/health/pain/spinemanipulation.htm

Military.com October 2019. *Excessive PT will cost the Army millions of lost workdays this year.* Two Army experts, Dr. Bruce Jones and Todd Hoover have a serious message for Army commanders: It's time to use science to help prevent the physical training injuries plaguing the force. Soldiers' musculoskeletal injuries are on track to cost the Army more than 8 million lost duty days this year. The knee injuries, back problems and other woes far outpace any other reasons for lost duty -- they add up to five times the days lost to pregnancy and maternity leave.
REF: https://www.military.com/daily-news/2019/10/17/excessive-pt-will-cost-army-millions-lost-work-days-year.html

In **2010 Agency for Healthcare Research and Quality (AHRQ)** report noted that **complementary health therapies, including spinal manipulation**, offer additional options to conventional treatments, which often have limited benefit in managing back and neck pain. The AHRQ analysis also found that spinal manipulation was more effective than placebo and as effective as medication in reducing low-back pain intensity.
REF: https://nccih.nih.gov/health/pain/spinemanipulation.htm#key

In the **Spine Journal 2010**, **a synthesis of literature** using MEDLINE, National Guidelines Clearinghouse, National Institute for Clinical Excellence, Internet search engines, and reference known articles was conducted to determine clinical practice guidelines [CPGs] and management of low back pain [LBP]. The recommendations for management of acute LBP emphasized patient education, with short-term use of acetaminophen, nonsteroidal anti-inflammatory drugs, or spinal manipulation therapy.
REF:http://halvorsonchiropracticclinic.com/wp-content/uploads/2013/01/Dagenais-2010-LBP-CPGs.pdf

PHYSICAL PERFORMANCE

Clinical Trials. 2019 Jan 3;20(1):5.doi: 10.1186/s13063-018-3133-2. DeVocht JW, Vining R, Smith DL, Long C, Jones T, Goertz C. *Effect of chiropractic manipulative therapy (CMT) on reaction time in special operations forces military personnel: A randomized controlled trial.* One hundred and seventy-five (175) SOF-qualified personnel were screened for eligibility; 120 participants were enrolled, with 60 randomly allocated to each group. Data from 77 participants were analyzed for simple hand/foot reaction time. The mean ± standard deviation (SD) age was 33.0 ± 5.6 years, and all participants were male. A single session of Chiropractic Manipulative Therapy (CMT) was shown to have an immediate effect of reducing the time required for asymptomatic SOF qualified personnel to complete a complex whole-body motor response task. However, sustained reduction in reaction or response time from five tests compared with a wait-list control group was not observed following three sessions of CMT.
REF: https://www.ncbi.nlm.nih.gov/pubmed/30606225?dopt=Abstract

Journal of American Medical Association (JAMA). JAMA Network Open 2018 May 18;1(1):e180105. doi: 10.1001/jamanetworkopen.2018.0105. *Effect of usual medical care plus chiropractic care vs usual medical care alone on pain and disability among US service members with low back pain: A comparative effectiveness clinical trial.* Chiropractic care, when added to usual medical care, resulted in moderate short-term improvements in low back pain intensity and disability in active-duty military personnel. This trial provides additional support for the inclusion of chiropractic care as a component of multidisciplinary health care for low back pain, as currently recommended in existing guidelines. However, study limitations illustrate that further research is needed to understand longer-term outcomes, as well as how patient heterogeneity and intervention variations affect patient responses to chiropractic care.
REF: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2680417

Military Medicine. Volume 179, Issue 10, October 2014, Pages 1106-1112, *Injury epidemiology of U.S. Army Special Operations Forces.*
Physical Training (PT) is critical to the prevention of musculoskeletal injuries and optimization of human performance in SOF, yet a significant number of injuries are sustained during such training activities. The majority of these injuries are preventable. Musculoskeletal injuries affecting the lower extremity, and the frequency and severity of these injuries may negatively impact force readiness. Implementation of injury prevention and human performance programming is critical to maintenance of the most important weapons system platform—the Operator. Specifically, based on this investigation, reducing acute sprain/strain injuries during running, lifting, cutting, and landing during the centralized PT and tactical training should be focused through proper technique and training intensity/duration.
REF: AMSUS (Association of Military Surgeons of the United States),
https://doi.org/10.7205/MILMED-D-14-00078

Pub Med. Trials. 2016; 17: 70. Published online 2016 Feb 9. doi: 10.1186/s13063-016-1193-8 PMCID: PMC4746780 PMID: 26857706 *Assessment of chiropractic treatment for active duty, U.S. military personnel with low back pain: Study protocol for a randomized controlled trial.*

A pilot study compared chiropractic care plus standard medical care with standard medical care alone for active duty military personnel with acute LBP. Improvements in pain and disability were significantly greater in the chiropractic care group. This comparative effectiveness study will evaluate whether these prior findings can be reproduced in a larger sample, across multiple sites, and with varied populations including individuals with subacute and chronic LBP. The information gleaned from this large, multisite trial may assist military healthcare providers to effectively treat a highly prevalent condition responsible for high healthcare costs, debilitating effects on patients, and military readiness.

REF: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4746780/

Biomed Central [BMC] Musculoskeletal Disorders 2011. 12:219

This study supports UCLF adjustments to Traditional Manipulative Chiropractic (TMC) adjustment procedures for decreasing the treatment frequency and intensity. Completing the study 1,090 patient had 4,920 office visits, requiring 2,653 upper cervical adjustments over 17 days or 2.4 adjustments per patient. The 2.4 UCLF adjustments is 4.5 total office visits per patient over 17 days. The typical routine chiropractic adjustment program requires 7-8 total adjustments, costing 44% more in time and care compared to UCLF. ***Conclusion:*** "Outcome assessments were significantly improved with less than three weeks of care and a higher level of patient satisfaction."

REF: https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/1471-2474-12-219

INJURY REHAB [JOINT PAIN, MUSCULOSKELETAL DISORDERS, MIGRAINES]

Journal of Athletic Training, 2017 Dec; 52(12): 1153–1160.doi: 10.4085/1062-6050-52.12.22. *Physical and performance characteristics related to unintentional musculoskeletal injury in special forces operators: A prospective analysis seventy-seven percent (77%) of musculoskeletal injuries sustained by U.S. Army Special Forces Operators are preventable.* The findings of this study demonstrate the importance of optimizing knee-extension strength, trunk strength, and knee position on landing to prevent musculoskeletal injuries in US Army SOF Operators. Operators with a deficit in knee-extensor strength were more likely to sustain a Lower Extremity injury. We also found that shoulder-retraction strength and shoulder internal-rotation deficits contributed to a higher likelihood of sustaining an injury. Additionally, the accumulation of risk factors seemed to compound the risk of sustaining injuries. Athletic trainers and military staff within the Armed Forces are in a unique position to develop and implement injury-prevention initiatives to minimize training-related musculoskeletal injuries. The findings from this study also highlight the need for individualized screening and training that focus on identifying and correcting musculoskeletal and performance deficits relative to peers. Future studies are needed to validate such training interventions in this population.
REF: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5759699/

Pub Med. Med Sci Sports Exerc. 2018 May;50(5):987-994. doi:10.1249 / MSS.0000000000001523 *Lower extremity injury increases risk of first-time low back pain in the U.S. Army.*
Low back pain (LBP) and lower extremity injuries (LEI) are primary reasons for lost duty days and disability among military populations. ***Conclusion:*** These findings suggest that a potential second order effect of LEI is an increased short-term risk for developing LBP, which should be considered during rehabilitation planning.
REF: https://www.ncbi.nlm.nih.gov/pubmed/29252971

British Medical Journal Open Sport Exerc Med. 2018; 4(1): e000471. Published online 2018 Dec 26. doi: 10.1136/bmjsem-2018-000471. *Epidemiology of musculoskeletal injuries among U.S. Air Force Special Tactics Operators: An economic cost perspective.* A total of 130 Operators participated in the study (age: 29.1±5.2 years). The 1-year cumulative incidence of MSI was 49.2 injured Operators/100 Operators/year. The most frequent anatomic location and sublocation for MSI were the lower extremity (40.9% of MSI) and shoulder (20.9%), respectively. Lifting was a common cause of MSI (21.8%). A large per cent of MSI (55.5%) occurred while Operators were engaged in either physical or tactical training. Common MSI types were pain/spasm/ache (44.5%). Many MSI (41.8%) were classified as potentially preventable by an injury prevention training programme. The total lifetime cost of these MSI was estimated to be approximately US $1.2 million. There is a need to develop a customized injury prevention program to reduce the burden and cost of MSI in this population.
REF: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6307598/

MIL Med. 2015 Dec;180(12):1233-8. doi: 10.7205/MILMED-D-14-00467. *Relationships between physical fitness, demands of flight duty, and musculoskeletal symptoms among military pilots.* Although the mechanisms of G-Forces induced stress on the spinal structure of military pilots are well understood, less is known about relationships between the intensity of physical activity, fitness, occupational musculoskeletal symptoms, and the degree of resulting disabilities. During an aeromedical examination, 93% of pilots who had passed fighter lead-in training reported flight duty-induced musculoskeletal disorders. The fittest pilots flew aircraft that induce the heaviest accelerations. They also reported more musculoskeletal pain than the other pilots. Yet they seemed to experience fewer disabilities, which highlights the importance of physical training in the maintenance of operational readiness.
REF: https://www.ncbi.nlm.nih.gov/pubmed/26633667

Pub Med 2015 J Manipulative Physiol Ther. 2015 Sep;38(7):477-83. doi: 10.1016/j.jmpt.2015.06.015. Epub 2015 Aug 16. *First-contact care with a medical vs chiropractic provider after consultation with a Swiss telemedicine provider: Comparison of outcomes, patient satisfaction, and health care costs in spinal, hip, and shoulder pain patients.* Spinal, hip, and shoulder pain patients had clinically similar pain relief, greater satisfaction levels, and lower overall cost if they initiated care with chiropractors [DCs], when compared with those who initiated care with MDs. The study sample included 403 patients who had seen MDs and 316 patients who had seen DCs as initial health care providers for their complaint. Mean costs per patient over 4 months were significantly lower in patients initially consulting DCs.
REF: https://www.ncbi.nlm.nih.gov/pubmed/26288262

Biomed Research International, VOL. 2015, Article ID 630472. *A study of migraine headache outcomes following Upper Cervical Low Force [UCLF] adjusting.* ***Conclusion:*** Study results suggest that the atlas realignment intervention may be associated with a reduction in migraine frequency and marked improvement in quality of life yielding significant reduction in headache-related disability as observed in this cohort.
REF: https://www.hindawi.com/journals/bmri/2015/630472/abs/

ELSEVIER, INC. (2018). *Benefits of a Yoga program for chronic low back pain in service members.*
Prevalence continues to grow significantly affecting civilian and military sectors alike. Despite well-established guidelines promoting conservative pain management, rates of narcotic prescriptions remain high in the U.S. *Conclusion:* The present pilot results have direct implications for future clinical programming and research in the areas of yoga-based interventions for chronic pain in military members and veterans. RESTORE integration into military primary care clinics may provide benefit to service members with LBP and potentially enhance military readiness and resilience. REF: http://www.archives-pmr.org/article/S0003-9993(17)31082-1/fulltext

Journal of the Canadian Chiropractic Association [JCCA]. (2009, August). VOL. 53-3: Page 17. This study affirms the effectiveness of UCLF and decreased need in intensity and frequency of patient care comparing UCLF to Manipulation. Statistically significant clinically meaningful improvement in neck pain and disability after an average of 13.6 days of UCLF adjusting. Care included 5.7 office visits with 2.7 upper cervical adjustments demonstrated. ***Conclusion.*** UCLF chiropractic instrument adjustments utilizing the alignment model is promising for the management of patients with neck pain based on assessment using outcome measures. Traditional Manipulative Chiropractic (TMC) treatment requirement requires a minimum of 6-7 adjustments is the same timeframe compared to 2.7 with UCLF adjusting procedures.
REF: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2732255/

JAMA. March 2018;319(10):1053. doi:10.1001/jama.2017.12281 *The military, industrial and public health features of narcotic addiction.* **Originally Published** March 16, 1918 *JAMA*. 1918;70(11):766- 768. It behooves us at this time to carefully consider, from every angle, all possible sources of man-power in order that we may claim for service many who believe themselves incapacitated for work, and forced to purposeful efforts of others, who have sought exemption by reason of acquired or assumed physical deficiencies. Distributed over the country are hordes of drug users in the age of conscription who, if drafted, must either claim exemption by reason of addiction, or, if accepted, must later be discharged as undesirable, or unable to serve, unless steps are taken to conserve this loss.
REF: https://jamanetwork.com/journals/jama/article-abstract/2674654?redirect=true

SLEEP and BLOOD PRESSURE

Sleep. Harvard researchers believe a part of the brain stem which they refer to as the parafacial zone, accounts for half the sleep-inducing neurochemical gamma-hydroxbuyrate, or GABA, which is a critical neurochemical that can induce healthy sleep. This is just one more way that they body tries to reset to good health. With proper alignment of C1 and C2 patients, nothing prevents one from falling into REM sleep. Anyone having pain or discomfort typically has trouble sleeping even when a good mattress, proper pillow and nutritional regimes are recommended. Without a good 7-8 hours a night of rest the body has a hard time resetting and getting ready for the next day. Overtime this contributes to additional stresses and the body being out of balance. While AOCC has tremendous benefits there are other factors to consider with restful sleep and the presence of disease, e.g., obesity, heart disease, COPD and more.
REF: Nature Neuroscience https://www.nature.com/articles/nn.3789

Journal of Human Hypertension [JHH] (2007, March), VOL. 21, 347–352. *Atlas vertebra realignment and achievement of arterial pressure.* 21, 347–352. A Chicago-area study of 50 individuals with a misaligned Atlas vertebra (located high in the neck) and high blood pressure showed that after a one-time specialized chiropractic adjustment, blood pressure decreased significantly. The decrease was equal to taking two blood-pressure drugs at once.
REF: http://www.chiro.org/research/ABSTRACTS/Atlas_Vertebra_Realignment.shtml

COMPANY OVERVIEWS

Physical Healthcare of Jacksonville [PHJ] provides patient-centered solutions for the continuum of care traditional medicine, Atlas Orthogonal Chiropractic Care, FitRx-Physical Therapy, Stem Cell and Platelet Rich Plasma [PRP] Therapy – regenerative treatment for skeletal and muscular healing. Dr. Pierce has provided care to athletes and industry workforces valuing AOCC, e.g., Jacksonville Jaguars, University of Florida Football players, military pilots, special forces operators, and medical technicians.

Mark A. Pierce, D.C., B.C.A.O., Dr. Pierce is one of only 14 Board Certified Atlas Orthogonal Chiropractors in the State of Florida and in practice for 30 years. He is the father of an CAPT USAF Fighter Pilot, F-16.
D-U-N-S Number: 048467834
CAGE Code: 8BMW6

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D Group Consulting Services Inc. [D Group] provides evidence-based solutions to help clients impact and measure their population through wellness, education, consulting services. Our effort is in providing quality work that creates client transformation through health & wellness–being your best! leaders & organizations–outperforming your market! research & human performance – creating sustainable change! Programs and services increase awareness in human performance and behavior change.

D Group is a Small Business Administration (SBA) HUBZone certified 56938 EDWOSB, a small business prime on the SeaPort NxG contract vehicle. Dorette Nysewander, EdD, “DrD” holds a Doctorate in Educational Leadership, Health Care Education. As a member of the Aerobics & Fitness Association of American (AFAA) Board of Education that developed the Basic Standards & Guidelines for Exercise Safety, she has trained military commands in U.S., Europe & Asia since 1990. Guidelines provide a range of scalability---starting out, peak performance and/or recovery. Her family has decades of military service. She is the mother of a MAJ USAF Medical Director, Flight Doc, & Internal Medicine Physician, DO, now in private practice.
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CAGE Code: 63MM1

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