
Enhancing the 3rd-Year Intern Clinical Experience

Procedures and Protocols for Supervised On-Site Chiropractic Care at Athletic Events

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The clinical education of the chiropractic intern can be enhanced by participation in an off-site treatment experience. A well planned and coordinated effort results in a win-win-win experience for the intern, the profession, and the patient/athlete. The supervised off-campus treatment of athletes at running road races and track meets has proven to be an excellent learning opportunity for interns, allowing them to apply their interpersonal, diagnostic, and treatment skills to an interested public. Following completion of a three-module qualification program, interns are selected to participate in off-campus events. A student-run sport science club administers all these modules. Module I covers paperwork procedures and protocols that include tracking the paper recording flow, patient flow, and emergency procedures. Module II, risk management, underscores the necessity of accurate record keeping, informed consent, treatment of minors, and issues regarding impaired judgment. Module III involves researching and summarizing a joint-related injury or sports-related condition. This research is placed in a common file for future reference by club members. Completion of all three modules is necessary before an intern can provide care at an event. An option is available, and encouraged, for the lower-trimester students to attend events in a chiropractic assistant capacity to manage patient intake and paperwork. A 13-question Likert scale survey was used to evaluate aspects of this treatment experience. Additional space was provided for written comments. This experience has been a peak learning educational experience for the interns. They have had the opportunity to interact with new patients and see the immediate impact their treatments have had on the patients. This has proven to promote their self-esteem and confidence in their blossoming skills. (*The Journal of Chiropractic Education* 16(2): 114-121, 2002)

Key words: athletic event protocols, athletic triage, intern experience, record keeping, regeneration, restoration, school clubs, sports chiropractic

INTRODUCTION

This article details the three-module system used to qualify 3rd-year chiropractic interns for an on-site treatment of athletes at running road races and track meets. Also discussed are the results of a survey given to the interns on their reactions to the experience. Finally a 2-year statistical breakdown of the treatments, procedures and chief complaints of the athletes treated by this outreach program are presented.

One of the weaknesses of the chiropractic intern's clinical experience is the limited opportunities for "real life" experiences. Pilot programs (1-5) have allowed a select few to observe on-site treatments or hospital rounds and externships may allow a "shadowing" observation period, but any real hands-on experience is limited to the student clinics. The opportunity to provide chiropractic care at a competitive road running race or a track meet has been demonstrated to be an excellent learning opportunity for both the interns and the athletes (1), while helping to promote the profession. These events provide a preselected population that is both health conscious and philosophically aligned (4,6-8), favoring holistic care over symptomatic treatment.

The Journal of Chiropractic Education
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Vol. 16, No. 2. Printed in U.S.A.
1042-5055/\$4.00

Student interns of the college's sport science club have been prequalified through participation in club activities, which include completion of a three-module educational program aimed at preparing them to handle the responsibility of the experience in a clinically prudent manner. The three modules include education on risk management, record keeping, and event procedures and protocols, and a summary research paper of an athletic injury that becomes part of the club's research file. Additionally, lower-trimester students are encouraged to participate as a chiropractic assistant at an event to understand better the pace and the flow of the paperwork. This experience has allowed the interns to participate as a member of the race's healthcare team. Patient care is coordinated through the triage model of athletic training (puncture wounds, strains, sprains, and other acute, non-life-threatening injuries), emergency medical services (life-threatening injuries or illnesses), and restorative or performance-enhancing care provided by chiropractors and massage therapists.

Upon return from the 1999 IAAF World Indoor Track and Field Championships, the author contacted the race director for the Freihofer's "Run for Women" to inquire about who was handling the chiropractic care for the race's athletes. Freihofer's "Run for Women" yearly receives the designation as the women's 5,000-meter road race championship by USA Track and Field, the national governing body for the sport. The race is conducted in Albany, NY and yearly draws a field of 3,000 athletes that includes the top female distance runners in America. There are 10,000–15,000 spectators along the course route. Due to excellent funding, widespread community support, and "Cadillac care" of the athletes, the Freihofer race has developed into one of the marquee road running events in America, arguably the premier women's race. Prior to 1999 there had been no organized chiropractic care provided at the race.

The race committee decided to offer chiropractic care on a trial basis. It was then requested of the race committee that supervised chiropractic interns be allowed to participate in the care of the athletes. School permission was sought from the Dean of Chiropractic Education and 10 interns were selected to participate. Basis for selection of this initial group included: (in no specific order) adjusting skills, personality, athletic background, the ability to maintain composure, and the ability to work with a group. The male/female ratio was evenly split. Prior to the

first event, three detailed and mandatory meetings were held to review paperwork, treatment protocols, and the logistics of the event and our role in the care of the athletes (1,2).

MATERIALS AND METHODS

Pre-event Planning

Depending on the size of the event and the arrival of the race invitation, pre-event planning can start as little as 2 weeks before or up to 3 months before the event. A letter requesting our services must be generated and received before calls are made to the college's insurance carrier (National Chiropractic Mutual Insurance Company, NCMIC). Notification of NCMIC includes information regarding race date and location, treatment times, the number of interns and supervising doctors on site, restatement of treatment procedures and protocols to be used, and a short description of the event. A certificate of insurance is generated for the race and other race-related entities as needed. A travel itinerary is put together (Fig. 1) and interns are selected.

The Module Education System

Beginning in January 2001, interns are required to complete a three-module training program before they are allowed to participate in an outreach experience. These modules were established to clarify the educational value of the experience and to define the necessity for a professional approach to the experience.

Module I is a risk management module. This module consists of a 1-hour classroom lecture and discussion and covers the role and responsibilities of an intern working under the license of another doctor. Issues covered include the necessity for accurate record keeping, the importance of a documented physical examination, discussion of informed consent, and the treatment of minors. Also covered is the concept of impaired judgment and discussion of why patients who have had alcohol cannot be treated.

Module II involves procedures and protocols. In this module, the description and management of paperwork are presented. Included is a mock run-through of how a patient/athlete is processed from the initial welcome and explanation of services to the care by the intern. Covered in this module are the subjective chief complaint, a focused history,

FACT SHEET	
EVENT: _____	LOCATION: _____
DATE: _____	DISTANCE: _____
Tx TIMES: _____	
WHAT YOU WILL DO: Full spine adjusting if the athlete desires following a focused history, screening questions, and chiropractic analysis.	
WHAT TO BRING:	portable table 128-Hz tuning fork SOT blocks disposable hand wipes Speeder board blood pressure cuff 1 roll of head rest paper **sunblock #15
BEHAVIOR: I expect everyone to be on their best behavior. Get to bed early the night before. Be wherever you have to be with plenty of time to set up. Plan on being flexible.	
TRAVEL DIRECTIONS:	
TRAVEL ITINERARY:	
WHAT TO WEAR: We will wear the light-blue college shirts. Wear some dark slacks or shorts and comfortable shoes.	
CLINIC RESPONSIBILITIES: Get your clinic responsibilities covered. Plan the absences for the semester accordingly. Get these details taken care of in advance.	
ACCOMMODATIONS:	
TREATMENT PROTOCOL: Acute cases will be seen by supervising doctor.	
<ul style="list-style-type: none"> Document chief complaint/area of concern Have patient sign informed consent Do focused history Barre-Leiou if you are going to adjust the cervicals Spinal scan for subluxation/dysfunction CMT as per findings Put completed SOAP sheets in the folder **See supervising doctor if you have any questions. 	

Figure 1. Fact sheet and travel itinerary for participating interns.

documentation and recording of objective findings, assessment, informed consent, and treatment. A one-page subjective/objective/assessment/plan (SOAP note) document has evolved that allows the intern to evaluate and treat the patient athlete safely and efficiently. Space is provided on the SOAP sheet for orthopedic tests as needed (Fig. 2).

Module III may be completed any time prior to or after completion of modules I and II. This module requires the student to research and summarize an

article on a sports-related topic or injury. This has generated a paper file for reference by the club that can be used throughout the student's education.

Although not required, new students are encouraged to volunteer for front desk/chiropractic assistant duties in their early trimesters. This works to familiarize the student with treatment protocols and the pace of activity associated with an event and provides a modeling opportunity for the newer student.

TREATMENT SOAP SHEET

You are being treated by Doctor/Intern _____

Name _____ Age _____ Date _____

Hometown _____ Sex M F Birthdate _____ Team _____

SUBJECTIVE/CHIEF COMPLAINT: maintenance/area of concern(noted) _____

1. Are you being treated for any current conditions? Yes No If yes, what? _____
2. Have you ever been adjusted by a chiropractor? Yes No
3. Who is your home chiropractor? _____ City _____
4. Are you adjusted "full spine?" (low back, mid back, neck).....Yes No
5. Do you want to be adjusted full spine today? (low back, mid back, neck).....Yes No
6. Have you had or do you have cancer, diabetes, heart disease, arthritis, osteoporosis or any other serious condition that you are aware of? Yes No
7. Do you bleed or bruise easily?Yes No If yes, which? _____
8. Are you currently under any medications?.....Yes No If yes, names _____
9. Is there anything you would like explained regarding chiropractic care? Yes No

10. Patient initial _____

OBJECTIVE: Vitals _____ **Only circled or marked items apply.**

Cervical

Lumbar

Barre-Leiou	Pos/Neg/NP init ___	SLR	PosR ___°/PosL ___°/NP init ___
Distraction	Pos/Neg/NP init ___	Fabare-Patrick	PosR/PosL/Neg/Hip/LBP init ___
Jackson Comp	Pos/Neg/NP init ___	Gol'waith	PosR/PosL/Neg/Level ___/NP init ___
		Nachlas	PosR/PosL/Neg/NP init ___
_____	PosR/PosL/NP init ___	Notes:	_____
_____	PosR/PosL/NP init ___		_____
_____	PosR/PosL/NP init ___		_____

Listings: _____

ASSESSMENT: S/S/S, VSC, SegDysfx at _____

S/S/S – subluxation, strain, sprain, VSC – vertebral subluxation complex, SegDysfx- Segmental Dysfunction

INFORMED CONSENT

I have received information about my condition and proposed chiropractic treatment as well as alternative courses of care. I understand that I am informed that, as in all health care, in the practice of chiropractic there are some risks involved in treatment, including but not limited to muscle strains, sprains, fractures, dislocations, disc injuries and strokes. I do not wish the doctor or intern to explain all risks and complications. I wish to rely on the doctor or intern to exercise judgment, in my best interests, during the course of treatments that they feel are appropriate based on the facts as they are known. My requests and questions for information about the proposed treatment have been answered. I have read, or have had had read to me, the above consent. I have also had the opportunity to ask questions about its content. **By signing the below I consent to chiropractic treatment.**

Patient's name printed _____ Patient's signature _____

Date _____

PLAN: Diversified, MFTP/Ishemic Comp, PIR/Stretch, ART _____

Figure 2. Assessment and treatment documentation form used for Freihofer's Run for Women.

Day-of-Event Preparations

Anticipation and excitement surrounds day-of-event preparations. The arrival time has been established so that setup will be completed well before

the first competitor arrives. Every effort has been made to operate in a fully self-sufficient manner. The interns bring portable tables, headrest paper, and other incidentals detailed in the travel itinerary.

There is a chest with a communal supply of hand wipes, speeder boards, tuning forks, chairs, banners, rope, and duct tape. Electricity is not necessary.

Once setup is completed, a general meeting is held, the chiropractic assistants are introduced, and the flow of paperwork is reviewed. Emergency procedures are reviewed. A dry-run is conducted. First-time interns are paired with veterans. The veterans get the first stream of patients. After a final reminder that acute patients are to be referred to the supervising doctor, a word of encouragement is given and the treatment site is opened to accept patients.

Postevent Procedures

Postevent procedures begin with a group debriefing, quickly reviewing any problems or concerns, and opportunity is given for any new suggestions or ideas. Any interesting personal comments are noted, or any general comments on the experience. A short evaluation of the experience is given to the intern, allowing them anonymously to summarize their experience and note any problems, concerns, or ideas they may have while they are fresh in their mind.

In the days following the race a statistical report is generated with such information as age ranges, male/female breakdown, number of chief complaints, adjustments by segment, and techniques utilized. This report is filed with the SOAP notes as part of the race's permanent record and a copy is forwarded to the race committee for utilization review.

Finally, a survey has been given to the treating interns to evaluate aspects of this on-site treatment experience. Interns were given the opportunity for written comments. Participation was voluntary. Responses to 10 of 13 questions were recorded on a five-point Likert scale, with the remaining items requiring a written response. Response delineation on the Likert scale ranged from a strongly agree to a strongly disagree. Percentages are noted under the following abbreviations: strongly agree (SA), agree (A), neutral (Neut), disagree (D), and strongly disagree (SD).

RESULTS

Most students chose to participate in the survey, with 28 of 31 interns responding. The first four

survey questions dealt with the promotion of individual confidence and specifically whether or not this experience complemented that of the clinical experience. Questions 5 and 6 dealt with whether or not this experience helped promote chiropractic. It should be noted that the tone of many of the "Like best..." written comments described this program as a "great way to get out and educate the public on chiropractic." Questions 7 through 9 dealt with the administrative and organizational aspects of the experience. It should be noted that the early interns who participated in this program did not have an opportunity to attend any of the modules. Procedures were detailed in the travel itinerary, "hallway meetings," and from older interns. The responses to these survey questions are shown in Table 1.

The survey also asked interns to indicate the average time spent with each patient. Treatment times were "perceived times" spent by the intern. No formal clock was used. Survey responses revealed that 11% of interns reported spending an average of 5 minutes with each patient; 25% spent 10 minutes with each patient; 57% spent 15 minutes with each patient; 7% spent 20 minutes with each patient; and none spent more than 20 minutes with each patient.

Three written questions allowed interns to express personal reactions to their participation in this event.

1. What was the toughest thing for you to do?

Explaining synopsis of chiropractic...maintain energy through a long day...talking at an easy level for runners to understand...getting patients to go over the paperwork while they were distracted (by the race)...father asked me if his daughter could be afforded menstrual relief from chiropractic care...relay the value of the adjustment while doing instant treatments...educating new patients about the benefits of chiropractic.

2. What changes would you recommend?

Remain separate from massage, some patients were confused, some patients wanted muscle work and it was difficult to accommodate them and explain we were chiropractors...excellent program...everything seemed good to me...posters outside the tent to explain what chiropractic is...thought it was great...more opportunities like this...separate DC's from massage...local DC's to refer to, information to take home.

3. What did you like best about the experience?

Educating and adjusting people who knew little about chiropractic...the exposure to different types of people and bodies...you had to think on

Table 1. Responses to Postevent Intern Survey

Survey questions	SA	A	Neut	D	SD
Was this experience meaningful for you?	75%	25%	0	0	0
Would you recommend this experience to others?	93%	7%	0	0	0
Do you feel this experience complements your clinical experience?	82%	18%	0	0	0
Do you feel this experience educated you as to the health care needs, wants, and desires of a competitive athlete?	53%	47%	0	0	0
Do you feel this program helps promote chiropractic?	93%	7%	0	0	0
Do you feel your patients were receptive to your treatments?	70%	30%	0	0	0
Do you feel you were adequately prepared for the paperwork?	53%	39%	7%	0	0
Did you feel the SOAP notes were cumbersome?	7%	18%	29%	36	11
Was the travel itinerary clear?	57%	29%	14%	0	0

your feet...adjusting lots of people and getting used to a fast pace, meeting athletes of a high caliber and seeing how chiropractic helps them...loved the atmosphere and meeting all the runners...the freedom to use our education...I enjoyed the time management issue, educating and persuading the runners and dealing with a health-conscious athlete...being able to educate someone about chiropractic who knew nothing about chiropractic and then adjust them for the first time...the positive response from patients after their first treatment and educating first-time patients about chiropractic...great way to see what you can do in the sport field, first time I got to adjust people outside clinic...meeting new receptive athletes...thinking and acting on your feet, seeing consistency in patient presentation...great way to get out and educate the public on chiropractic while enhancing my knowledge...the patient interaction was the best!

Utilization of chiropractic services at the race has increased in successive years, with a 20% increase in demand comparing years 2000 with 2001 and a 654% increase when comparing years 1999 with 2001. First-time chiropractic patients accounted for 47% of the patient visits for 2000 and 2001. Basic patient demographics for the years 2000 and 2001 are shown in Table 2. Anatomical location of chief complaint in patients receiving chiropractic care for the years 2000 and 2001 are shown in Table 3. Frequency of adjustment to various body areas and frequency of techniques employed for the years 2000 and 2001 are presented in Table 4.

Table 2. Basic Demographics of Chiropractic Patients Seen at 2000 and 2001 Freihofer's Run for Women

	2000	2001
Chiropractic treatments	300	360
Total treatment hours	22	21
First-time treatments	126 (42%)	188 (52%)
Male/female breakdown	37/263	24/336
Age ranges (years)	6-76	9-68

Table 3. Location of Chief Complaint in Chiropractic Patients Seen at 2000 and 2001 Freihofer's Run for Women

Location of complaint	Number of chief complaints in:	
	2000	2001
Maintenance	143 (45.30%)	206 (55.60%)
Low back pain	71 (22.50%)	51 (13.80%)
Cervical/neck	33 (10.40%)	35 (9.40%)
Thoracic	23 (7.30%)	12 (3.20%)
Hip	13 (4.10%)	4 (1.08%)
Shoulder	10 (3.10%)	25 (6.75%)
Hamstrings	5 (1.60%)	2 (1.00%)
Knee	4 (1.20%)	6 (1.60%)
Elbow	4 (1.20%)	3 (1.00%)
Calf	2 (1.00%)	3 (1.00%)
Legs (general)	2 (1.00%)	12 (3.20%)
Ankle/foot	3 (1.00%)	5 (1.35%)
Gluts	2 (1.00%)	0
Quads	0	2 (1.00%)
Shins	0	2 (1.00%)
Visceral	0	2 (1.00%)
Hand	0	1 (1.00%)
Total	315	370

Table 4. Frequency of Adjustment to Various Body Areas and Frequency of Techniques Employed Seen at 2000 and 2001 Freihofer's Run for Women

Adjustment/technique	Number of adjustments/techniques in:	
	2000	2001
Segmental adjustments		
Lumbar	238 (33.50%)	264 (27.80%)
Thoracic	233 (32.80%)	276 (29.10%)
Cervical	205 (28.90%)	242 (25.50%)
Hamstring	10 (1.40%)	51 (5.40%)
Quad	10 (1.40%)	14 (1.40%)
Legs (general)	5 (1.00%)	24 (2.80%)
Shoulder	2 (1.00%)	21 (2.20%)
Foot/calf	0	27 (2.80%)
Miscellaneous	6 (1.00%)	28 (2.90%)
Total	709	947
Osseous and soft-tissue techniques		
Diversified adjustments	275 (63.60%)	296 (43%)
PIR/stretch	37 (8.50%)	191 (27.80%)
MFTP/ischemic compression	94 (21.70%)	165 (24.00%)
SOT	10 (2.30%)	12 (1.70%)
Active release technique	8 (1.80%)	23 (3.30%)
Ice	3 (1.00%)	0
Williams' flexion	2 (1.00%)	0
Referrals	2 (1.00%)	0
Long-axis traction	1 (1.00%)	0
Total	432	687

PIR, postisometric relaxation; MFTP, myofascial trigger point.

DISCUSSION

The initial assertion—that this program of on-site care of athletes at road races and track meets has proven to be a win-win-win experience for the interns, athletes, and profession—can be substantiated by the race statistics and the results of the intern survey. The vast majority of student interns “strongly agreed” that the opportunity to treat athletes at road races and track meets was a positive experience for them on numerous levels. The survey showed that participation allowed them the full use of their knowledge and diagnostic skills and enhanced their feelings of competence. There was also strong agreement that this experience complimented the more formal clinical experience.

The fact that the athletes have benefited from this service can be evidenced in their ever-increasing utilization numbers with a 20% increase in demand comparing years 2000 with 2001 and a 654% increase when comparing years 1999 with 2001. Also of note is the fact that roughly 50% of the

patient visits in the years 2000 and 2001 were for nonsymptomatic “maintenance care.” Although it can only be inferred as to why the athletes used this service, this would be an informative question on the exit survey.

The chiropractic profession wins from this experience on several levels. This experience helps provide the profession exposure through association with one of the marquee athletic events in America. The event also allows for a significant number of interns to participate, affording to many a peak learning experience early in their chiropractic careers. This opportunity allows chiropractic care to integrate into the larger health care picture and to service a niche that can be uniquely treated by chiropractic, that of restorative and regenerative care. Equally important is that this is all done while the profession maintains its autonomy.

A final statistic that warrants comment is that of the number of first-time patients (47% of the patient visits over the last 2 years). What better way to promote the profession and galvanize the spirits of

our best and brightest than through public interaction, articulately answering questions, delivering an adjustment, and allowing the athlete to experience the benefits of chiropractic care for the first time.

There are several areas for further study that would be illuminating. While the satisfaction with this educational experience has been documented from the intern's point of view, it would be enlightening to conduct an "exit survey" with the patients/athletes to see how their experience compares to that of the interns. An exit survey would also afford the opportunity to document how the patients/athletes' perception of chiropractic was affected by the care they received. This information would allow for more accurate streamlining and modification of event procedures and protocols at future events.

CONCLUSION

As the general acceptance by the public of chiropractic as a legitimate health care profession continues to grow, it is through visible opportunities such as the on-site treatment of athletes at road races and track meets that the profession can be promoted with its "best and brightest." This study offers a workable model that allows a select group of prequalified student interns the opportunity to realize one of their early professional goals. This model also offers the profession an opportunity at integration within the larger health care picture, while at the same time maintaining the profession's autonomy. For the athlete, this model allows for inquiry and/or

utilization in a low-key environment. This study also offers statistical evidence of the strong demand for chiropractic care if and when the service is available. The need for restorative care is of particular importance to athletes whose predominate mechanism of injury is the training error or overuse syndrome, characteristically seen with runners and track-and-field athletes.

Received, June 4, 2001

Revised, April 1, 2002

Accepted, July 15, 2002

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