Fédération Internationale de Chiropratique du Sport
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Date: 21 April 2026
Re: FICS Report, TWG2025 in Chengdu, China

Dear International World Games Association (IWGA),

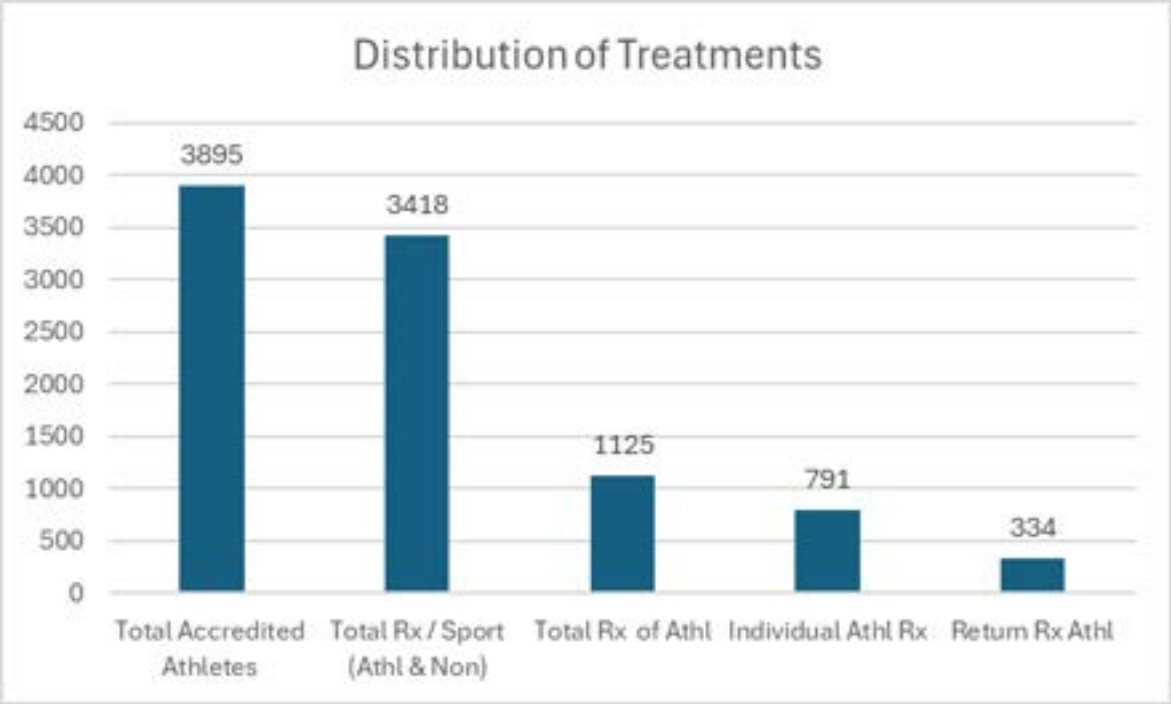
The following is the FICS report regarding our involvement in TWG2025 in Chengdu, China. This report is based on the FICS delegations' experiences and observations during the Games. The intent is to further inform the IWGA on the analysis of the data captured at this event by the FICS delegation. We hope this will initiate discussions and inform the **IWGA** and local organizers about future Games. The intent of the information is to inform the **IWGA** of the care their athletes received during these Games and how it may inform and improve your sport. We cherish our partnership with the IWGA and hope this will be informative on how we can further develop our involvement with the IWGA and support future Games.

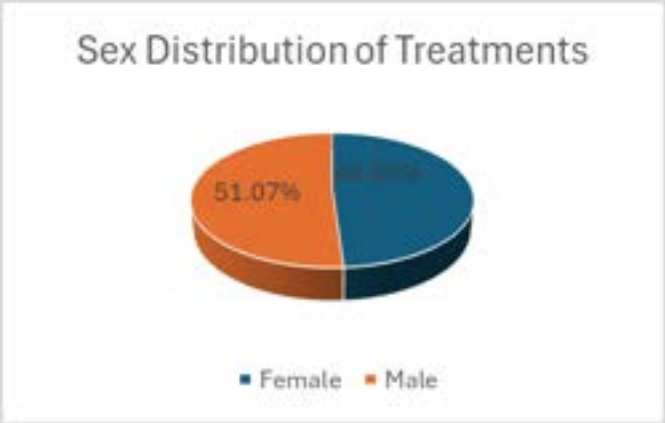
The World Games 2025 overall statistics:

To provide an overview of utilization of the FICS delegation at TWG2025, the following are some of the key statistics on the treatments provided voluntarily to all the accredited individuals during the Games.

There were **6634** accredited athletes and officials at TWG2025.

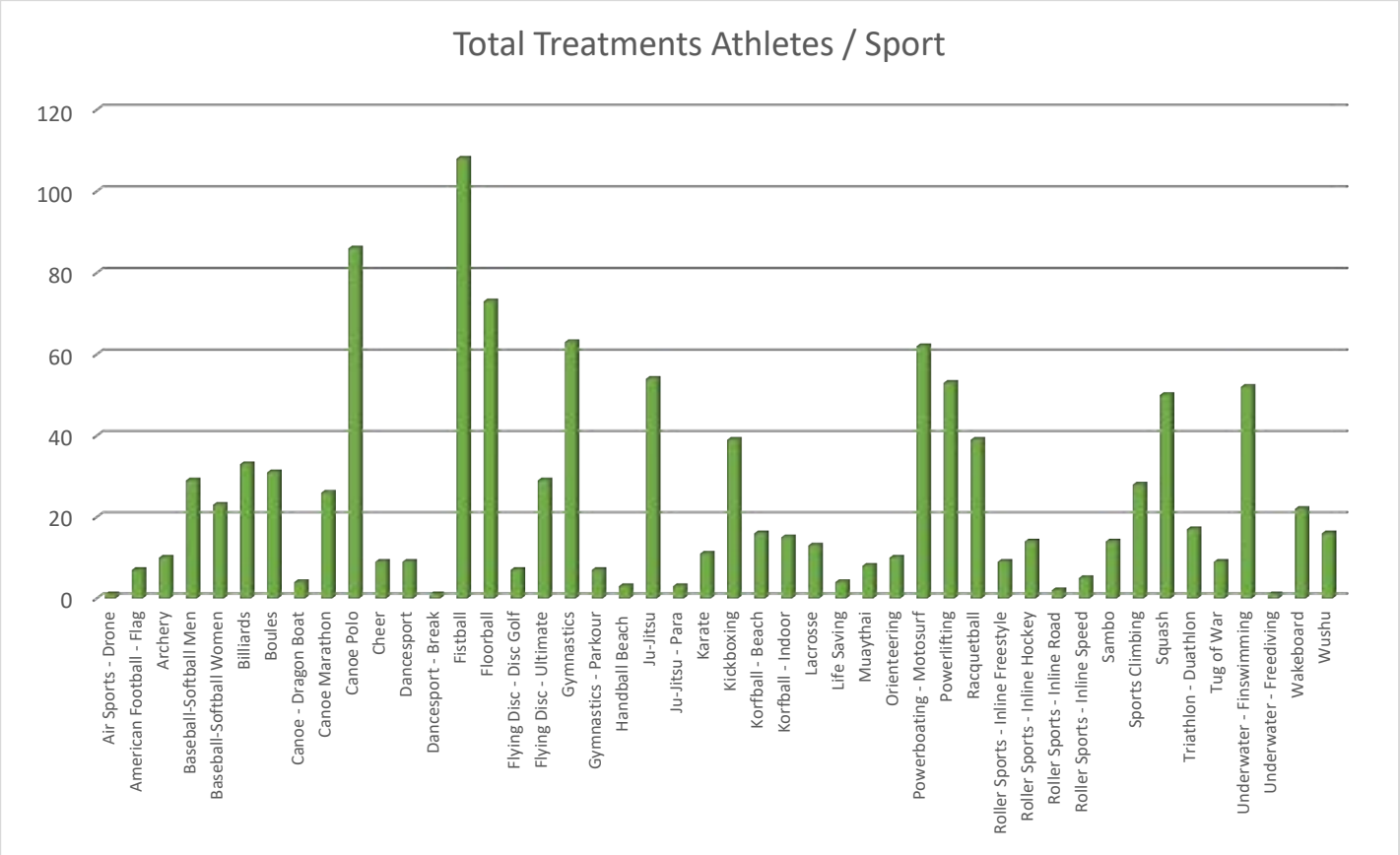
- **3895** athletes, **2739** officials and **25201** volunteers.
- The FICS delegation provided **3418** total treatments during the Games (**1125** to athletes, **1719** to non-athletes).
- Analyzing the athletes that sought our care, **791** individual athletes were treated or **20.31% of all athletes accredited** for the Games. This percentage of athletes were down from TWG2022 25.71% but probably due to the distance of the venues and transportation of the athletes.
- The treatments included those that saw us for the first time (new treatment) and those that came back for additional treatment (follow up). Of the 1125 athletes that were treated, **791** were new treatments and **334** were follow up treatments.
- The gender distribution **791** athletes treated was **404 (51.07%) males and 387 (48.93%) females**.



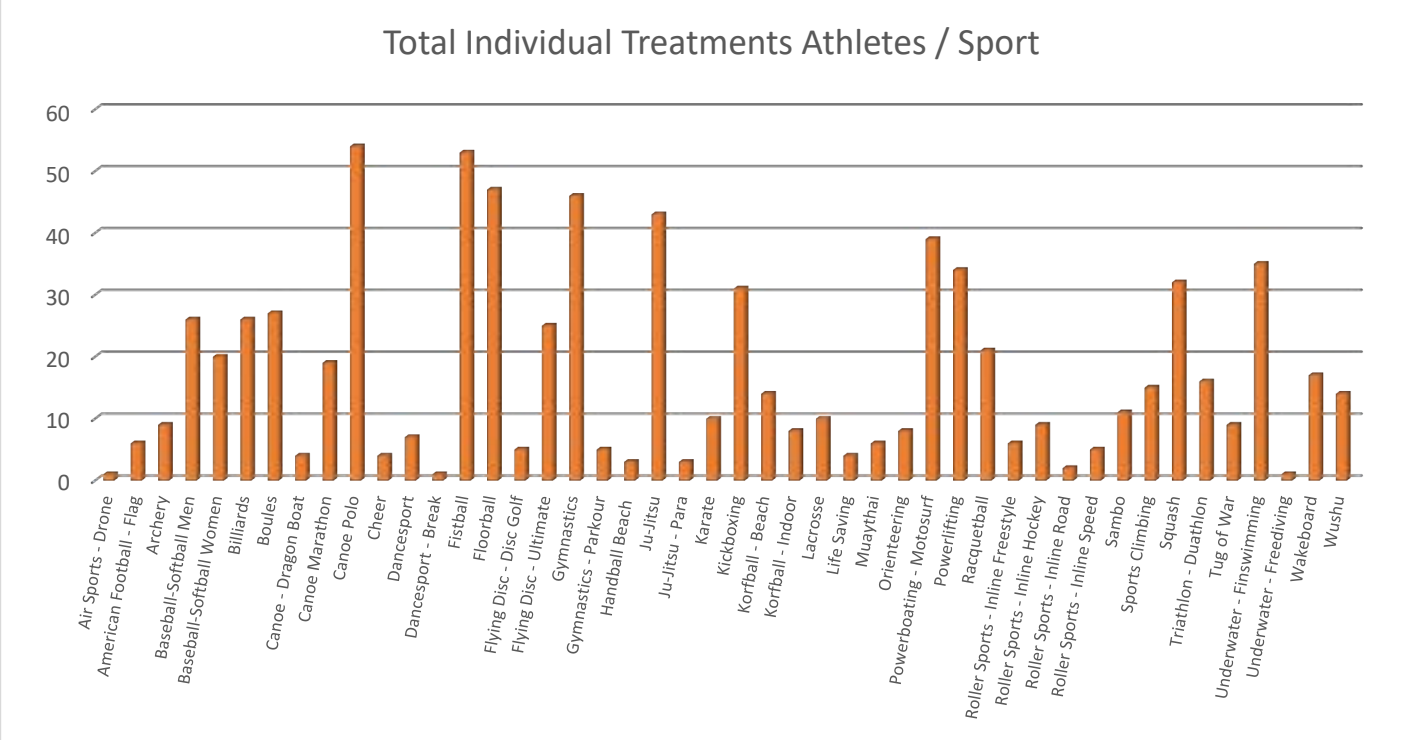


Athletes:

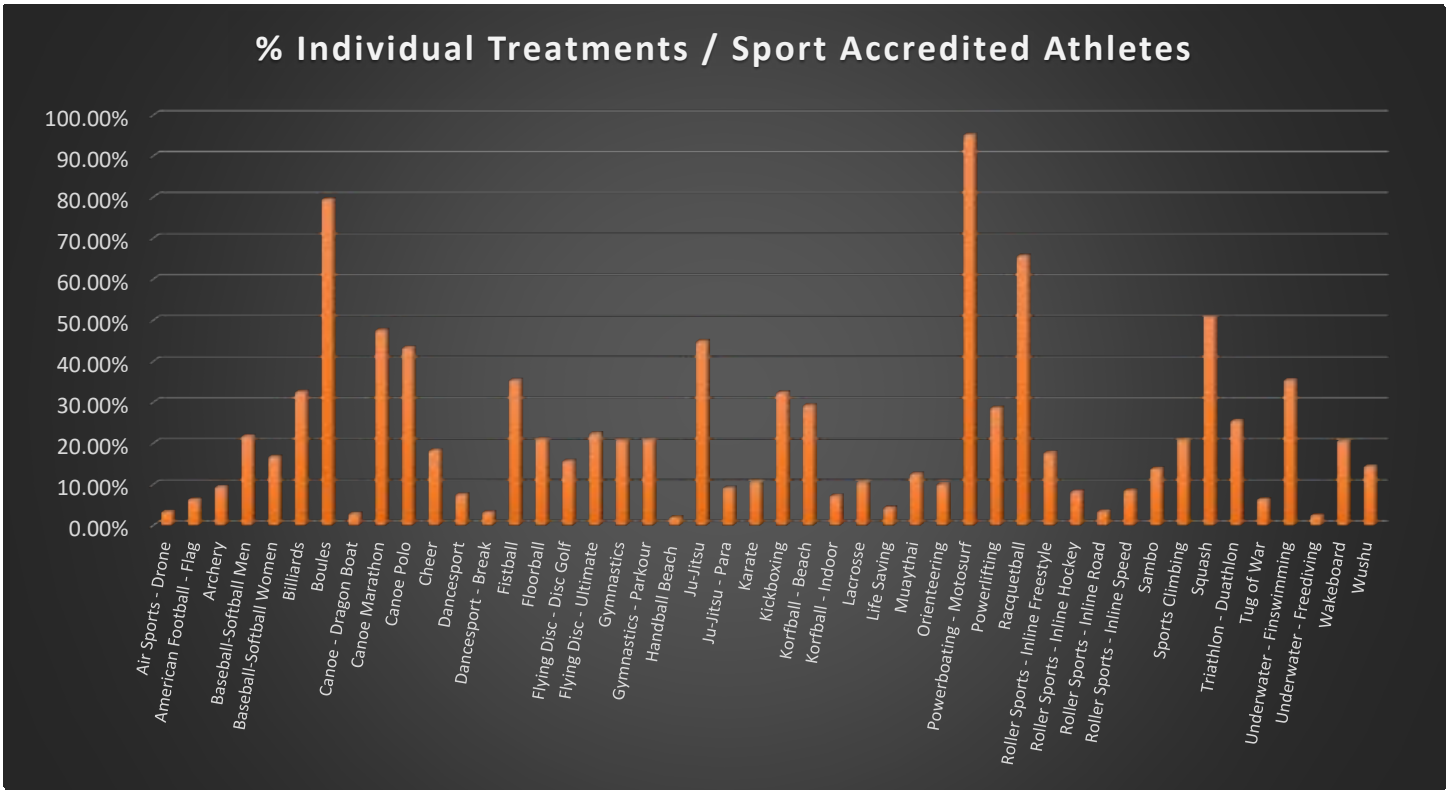
For the first time at TWG we were able to have our FICS sports chiropractors at every venues during the event. Athletes from all sports requested treatment (See Graph 1, 2, 3, 4; Chart 1). A total of **1125** treatments consisting of new (791) and follow-up (334) treatments were provided.



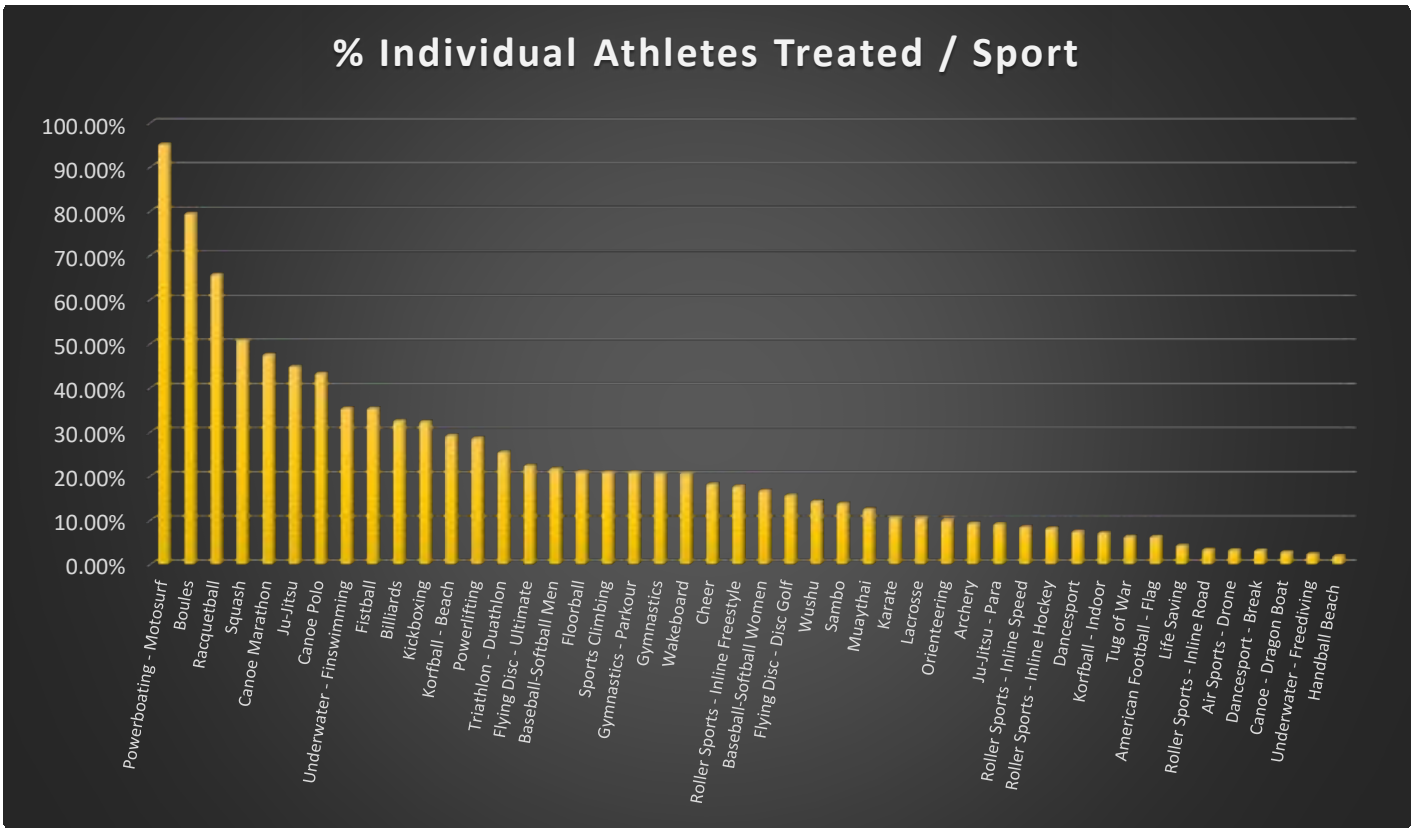
Graph 1: Total (new & follow up) treatments of athletes per sport.

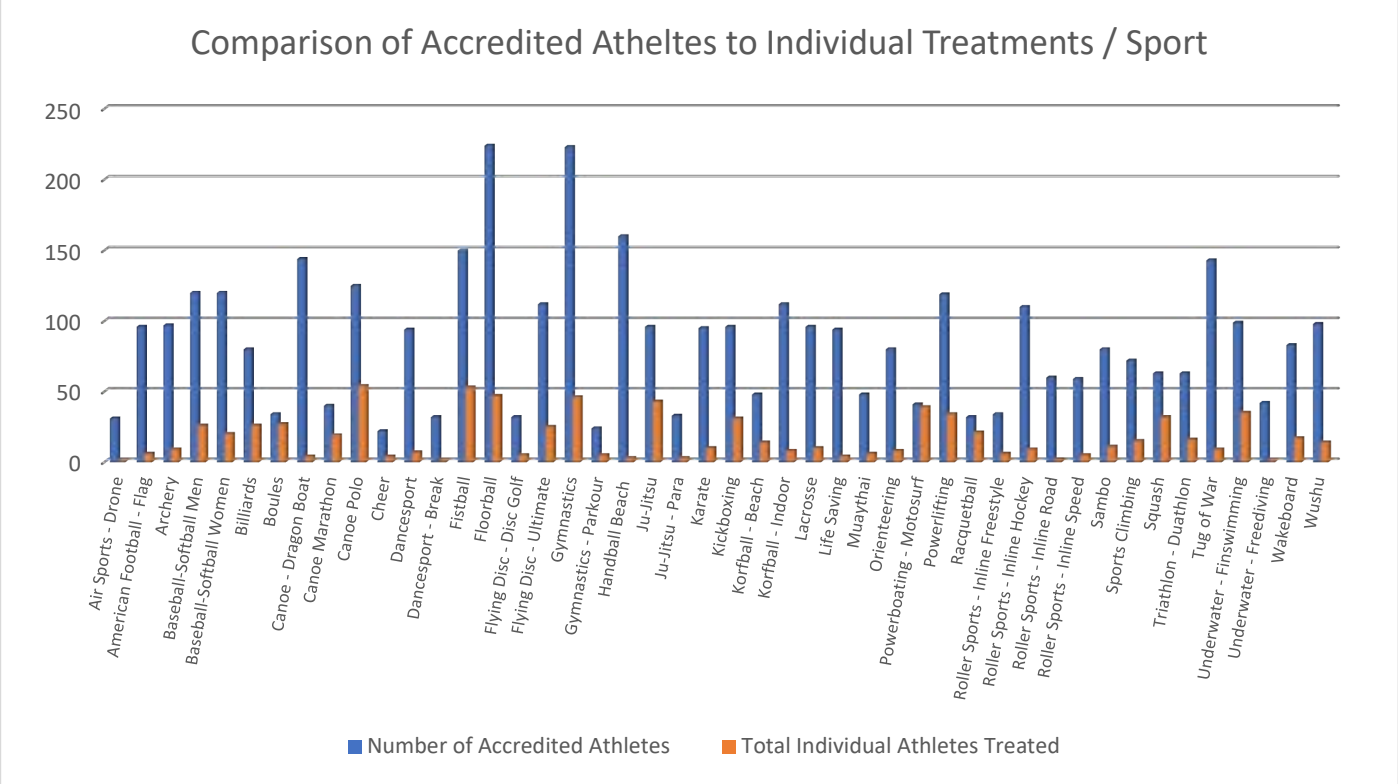


Graph 2: Total individual (new) athletes treated per sport.



Graph 3: Percentage of Total individual (new) athletes treated to Total accredited athletes per sport.





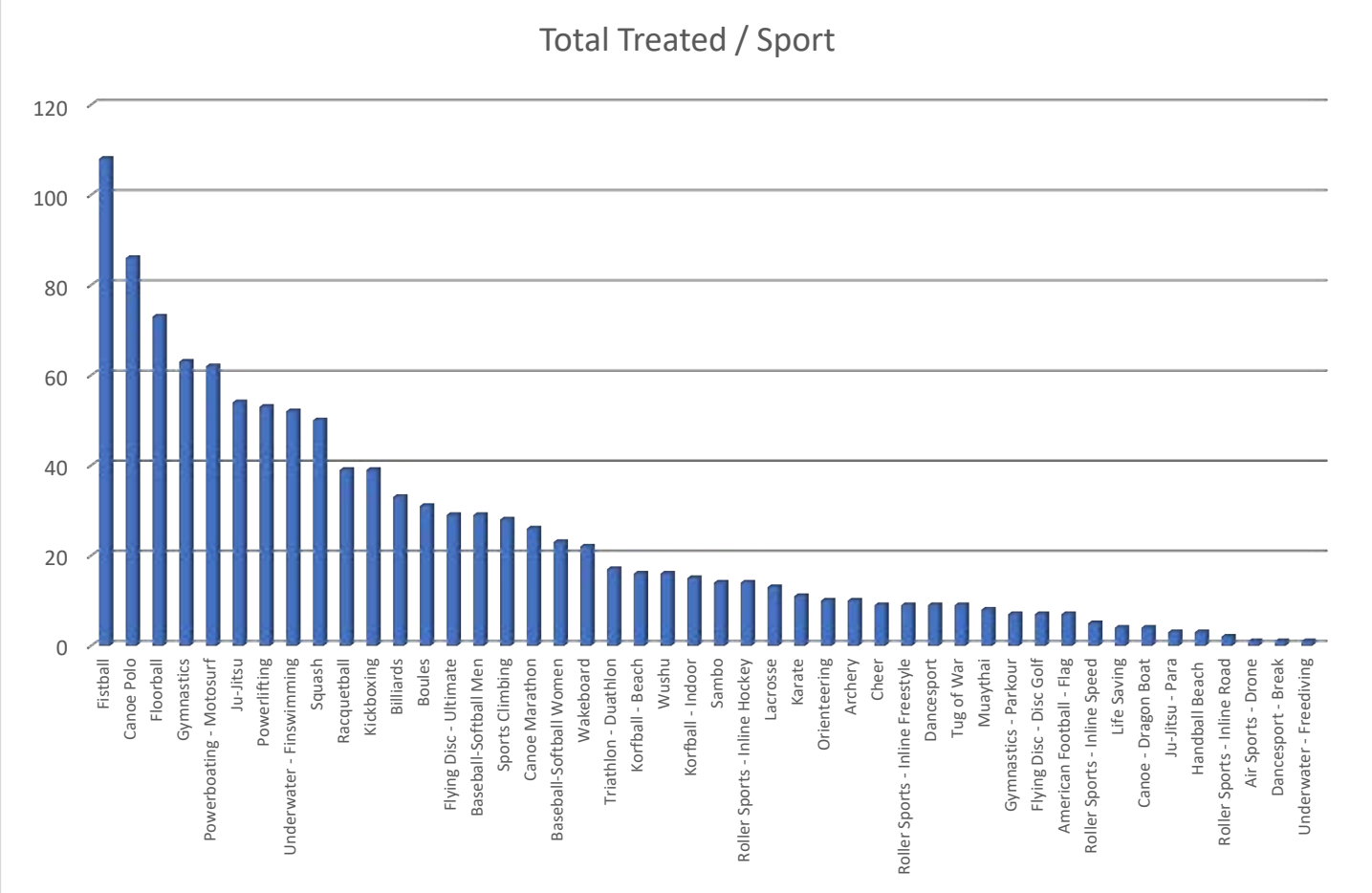
Graph 4: Comparison of Number of Accredited Athletes in each sport to Total individual (new) athletes treated per sport.

Sport	Total Accredited Athletes	Total Treatments of Athletes	Individual Athlete Treatments	% Individual Athletes/ Sport Accredited Athletes	Return Treatment Athletes	Male	Female
Powerboating - Motosurf	41	62	39	95.12%	23	27	12
Boules	34	31	27	79.41%	4	14	13
Racquetball	32	39	21	65.63%	18	14	7
Squash	63	50	32	50.79%	18	17	15
Canoe Marathon	40	26	19	47.50%	7	11	8
Ju-Jitsu	96	54	43	44.79%	11	25	18
Canoe Polo	125	86	54	43.20%	32	22	32
Underwater - Finswimming	99	52	35	35.35%	17	16	19
Fistball	150	108	53	35.33%	55	29	24
Billiards	80	33	26	32.50%	7	15	11
Kickboxing	96	39	31	32.29%	8	15	16
Korfball - Beach	48	16	14	29.17%	2	9	5
Powerlifting	119	53	34	28.57%	19	13	21
Triathlon - Duathlon	63	17	16	25.40%	1	9	7
Flying Disc - Ultimate	112	29	25	22.32%	4	12	13
Baseball-Softball Men	120	29	26	21.67%	3	26	0
Floorball	224	73	47	20.98%	26	25	22
Gymnastics - Parkour	24	7	5	20.83%	2	3	2
Sports Climbing	72	28	15	20.83%	13	6	9
Gymnastics	223	63	46	20.63%	17	27	19
Wakeboard	83	22	17	20.48%	5	6	11
Cheer	22	9	4	18.18%	5	0	4
Roller Sports - Inline Freestyle	34	9	6	17.65%	3	3	3
Baseball-Softball Women	120	23	20	16.67%	3	0	20
Flying Disc - Disc Golf	32	7	5	15.63%	2	3	2
Wushu	98	16	14	14.29%	2	5	9
Sambo	80	14	11	13.75%	3	6	5
Muaythai	48	8	6	12.50%	2	3	3
Karate	95	11	10	10.53%	1	7	3
Lacrosse	96	13	10	10.42%	3	0	10
Orienteering	80	10	8	10.00%	2	4	4
Archery	97	10	9	9.28%	1	3	6
Ju-Jitsu - Para	33	3	3	9.09%	0	1	2
Roller Sports - Inline Speed	59	5	5	8.47%	0	3	2
Roller Sports - Inline Hockey	110	14	9	8.18%	5	9	0

Dancesport	94	9	7	7.45%	2	4	3
Korfball - Indoor	112	15	8	7.14%	7	3	5
Tug of War	143	9	9	6.29%	0	1	8
American Football - Flag	96	7	6	6.25%	1	3	3
Life Saving	94	4	4	4.26%	0	0	4
Roller Sports - Inline Road	60	2	2	3.33%	0	1	1
Air Sports - Drone	31	1	1	3.23%	0	1	0
Dancesport - Break	32	1	1	3.13%	0	0	1
Canoe - Dragon Boat	144	4	4	2.78%	0	1	3
Underwater - Freediving	42	1	1	2.38%	0	0	1
Handball Beach	160	3	3	1.88%	0	2	1

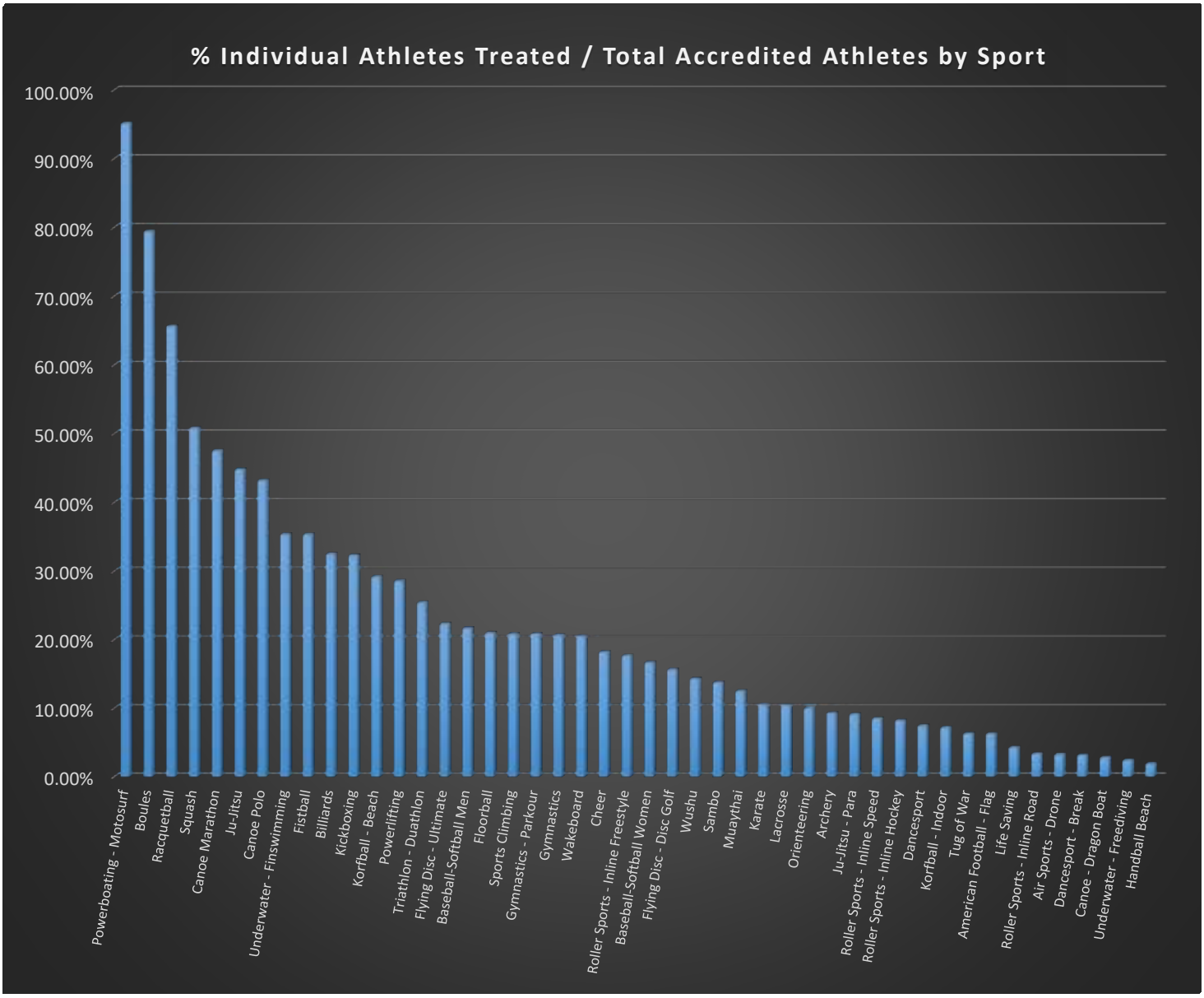
Chart 1: Total Treatments/Sport and Total New (Individuals)/Sport

The number of total treated demonstrated Fistball (108), Canoe Polo (86), Floorball (73), Gymnastics (63), Powerboating (motosurf) (62), Ju-Jitsu (54), and Powerlifting (53) utilized our services. (Graph 3).



Graph 6: Percentage of individual athletes treated per sport.

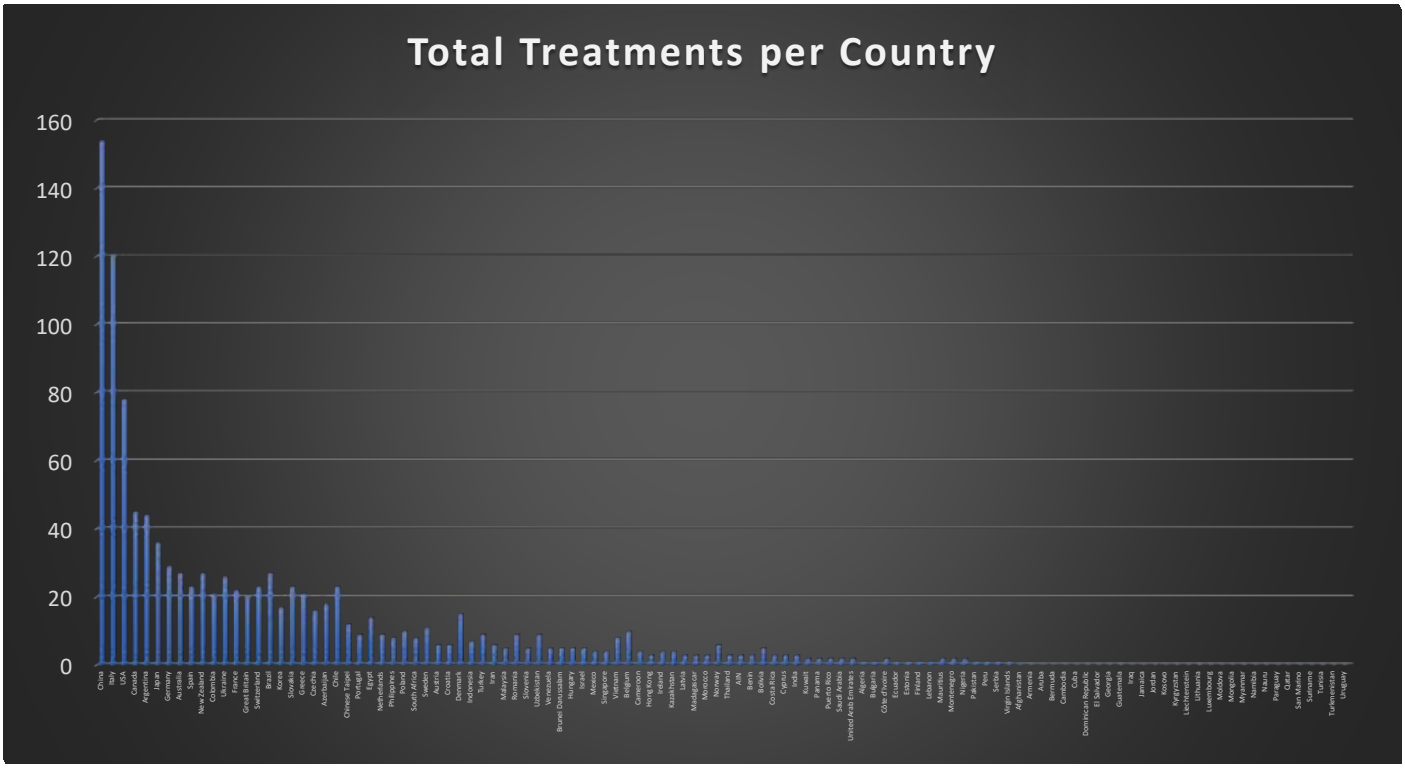
However, comparing the number of individual athletes treated to the number of athletes accredited by that sport demonstrated an interesting comparison of the percentage of athlete utilization per sport (Graph 4). Powerboating (motosurf) (95%), Boules 79%), Racquetball (66%), Squash (51%), Canoe Marathon (48%), Ju-Jitsu (45%), and Canoe Polo (43%) were the top 7 sports that athletes requested individual treatments compared to total accredited athletes by sport (Graph 7).



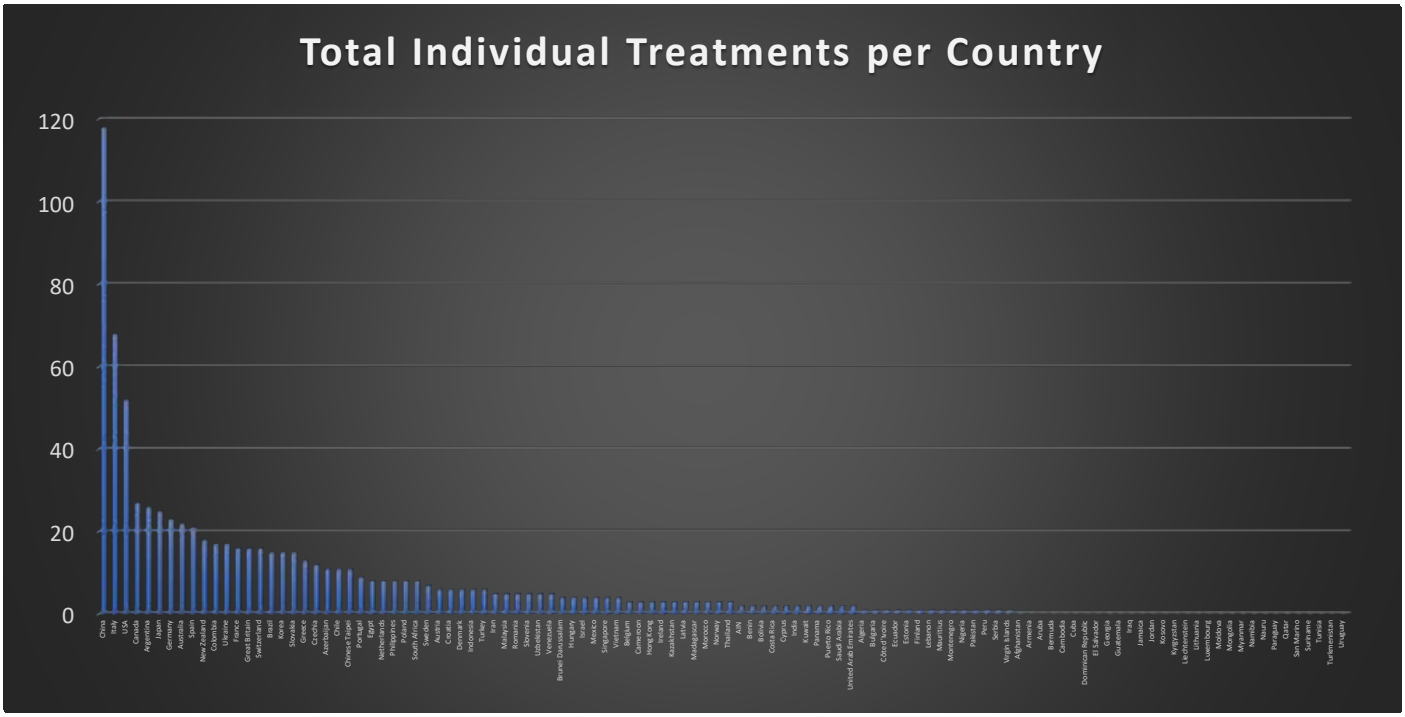
Graph 7: Percentage of individual athletes treated per number of Accredited Athletes by sport.

Countries:

The country distribution of athletes that requested our care demonstrated China, Italy, USA, Canada, Argentina, Japan, and Germany as the top 7 nations (Graph 8 & 9, Chart 2).



Graph 8: Total (new & follow up) treatments of athletes per country.



Graph 9: Total individual athletes treated per country.

The percentage of individual athletes treated per country compared to the total number of accredited athletes accredited for that country demonstrated that many of the countries had more than 50% of their athletes request our care. This statistic is skewed for those countries that only had a few athletes but even those countries with larger number of athletes requested our care. We were also interested in demonstrating that many of the countries that are smaller and may have no or limited medical services as part of their teams were able to still obtain care with our delegation. It is the mission of FICS to provide an equitable playing field and equitable medical services for all athletes. This data helps to support those countries that might not have access to sports chiropractic or other medical services. As an example, those countries highlighted in Blue had large utilization but lower total accredited athletes. (Chart 2). A total of 30 (27%) of the 112 countries competing did not use our service or 82 (73%) requested our services by their athletes.

Country	Accredited Athletes	New Athlete	Follow-up	Total Treatments	% of Accredited Athletes/ country	% of Total New Athletes To Total Accredited Athletes	Male	Female
China	320	118	36	154	36.88%	14.92%	50	68
Italy	189	68	52	120	35.98%	8.60%	42	26
USA	180	52	26	78	28.89%	6.57%	33	19
Canada	130	27	18	45	20.77%	3.41%	11	16
Argentina	65	26	18	44	40.00%	3.29%	16	10
Japan	151	25	11	36	16.56%	3.16%	12	13
Germany	211	23	6	29	10.90%	2.91%	13	10
Australia	120	22	5	27	18.33%	2.78%	8	14
Spain	104	21	2	23	20.19%	2.65%	11	10
New Zealand	54	18	9	27	33.33%	2.28%	4	14
Colombia	50	17	4	21	34.00%	2.15%	10	7
Ukraine	99	17	9	26	17.17%	2.15%	7	10
France	130	16	6	22	12.31%	2.02%	8	8
Great Britain	90	16	4	20	17.78%	2.02%	5	11
Switzerland	91	16	7	23	17.58%	2.02%	8	8
Brazil	52	15	12	27	28.85%	1.90%	4	11
Korea	67	15	2	17	22.39%	1.90%	9	6

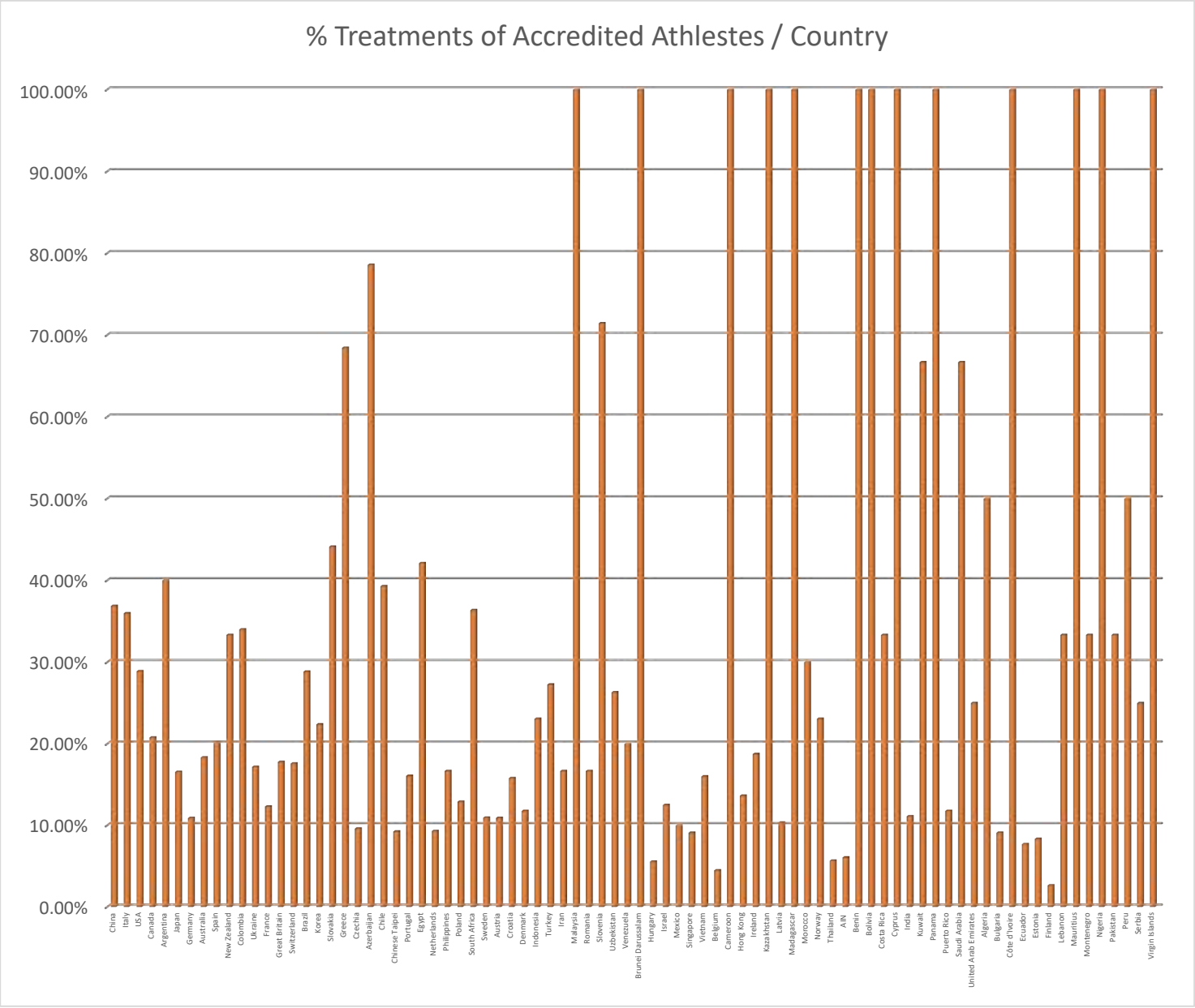
Slovakia	34	15	8	23	44.12%	1.90%	7	8
Greece	19	13	8	21	68.42%	1.64%	5	8
Czechia	125	12	4	16	9.60%	1.52%	8	4
Azerbaijan	14	11	7	18	78.57%	1.39%	9	2
Chile	28	11	12	23	39.29%	1.39%	6	5
Chinese Taipei	119	11	1	12	9.24%	1.39%	3	8
Portugal	56	9	0	9	16.07%	1.14%	6	3
Egypt	19	8	6	14	42.11%	1.01%	6	2
Netherlands	86	8	1	9	9.30%	1.01%	2	6
Philippines	48	8	0	8	16.67%	1.01%	4	4
Poland	62	8	2	10	12.90%	1.01%	4	4
South Africa	22	8	0	8	36.36%	1.01%	4	4
Sweden	64	7	4	11	10.94%	0.88%	4	3
Austria	55	6	0	6	10.91%	0.76%	3	3
Croatia	38	6	0	6	15.79%	0.76%	4	2
Denmark	51	6	9	15	11.76%	0.76%	2	4
Indonesia	26	6	1	7	23.08%	0.76%	0	6
Turkey	22	6	3	9	27.27%	0.76%	3	3
Iran	30	5	1	6	16.67%	0.63%	0	5
Malaysia	5	5	0	5	100.00%	0.63%	2	3
Romania	30	5	4	9	16.67%	0.63%	4	1
Slovenia	7	5	0	5	71.43%	0.63%	2	3
Uzbekistan	19	5	4	9	26.32%	0.63%	3	2
Venezuela	25	5	0	5	20.00%	0.63%	4	1
Brunei Darussalam	4	4	1	5	100.00%	0.51%	2	2
Hungary	72	4	1	5	5.56%	0.51%	4	0
Israel	32	4	1	5	12.50%	0.51%	2	2
Mexico	40	4	0	4	10.00%	0.51%	3	1
Singapore	44	4	0	4	9.09%	0.51%	1	3
Vietnam	25	4	4	8	16.00%	0.51%	3	1
Belgium	67	3	7	10	4.48%	0.38%	2	1
Cameroon	3	3	1	4	100.00%	0.38%	1	2
Hong Kong	22	3	0	3	13.64%	0.38%	2	1
Ireland	16	3	1	4	18.75%	0.38%	2	1
Kazakhstan	3	3	1	4	100.00%	0.38%	3	0
Latvia	29	3	0	3	10.34%	0.38%	3	0

Madagascar	3	3	0	3	100.00%	0.38%	2	1
Morocco	10	3	0	3	30.00%	0.38%	2	1
Norway	13	3	3	6	23.08%	0.38%	1	2
Thailand	53	3	0	3	5.66%	0.38%	2	1
AIN	33	2	1	3	6.06%	0.25%	1	1
Benin	2	2	1	3	100.00%	0.25%	1	1
Bolivia	2	2	3	5	100.00%	0.25%	1	1
Costa Rica	6	2	1	3	33.33%	0.25%	1	1
Cyprus	2	2	1	3	100.00%	0.25%	2	0
India	18	2	1	3	11.11%	0.25%	1	1
Kuwait	3	2	0	2	66.67%	0.25%	2	0
Panama	2	2	0	2	100.00%	0.25%	2	0
Puerto Rico	17	2	0	2	11.76%	0.25%	0	2
Saudi Arabia	3	2	0	2	66.67%	0.25%	2	0
United Arab Emirates	8	2	0	2	25.00%	0.25%	0	2
Algeria	2	1	0	1	50.00%	0.13%	0	1
Bulgaria	11	1	0	1	9.09%	0.13%	1	0
Côte d'Ivoire	1	1	1	2	100.00%	0.13%	1	0
Ecuador	13	1	0	1	7.69%	0.13%	1	0
Estonia	12	1	0	1	8.33%	0.13%	0	1
Finland	38	1	0	1	2.63%	0.13%	1	0
Lebanon	3	1	0	1	33.33%	0.13%	1	0
Mauritius	1	1	1	2	100.00%	0.13%	1	0
Montenegro	3	1	1	2	33.33%	0.13%	0	1
Nigeria	1	1	1	2	100.00%	0.13%	1	0
Pakistan	3	1	0	1	33.33%	0.13%	1	0
Peru	2	1	0	1	50.00%	0.13%	1	0
Serbia	4	1	0	1	25.00%	0.13%	0	1
Virgin Islands	1	1	0	1	100.00%	0.13%	1	0
Afghanistan	1	0	0	0	0.00%	0.00%	0	0
Armenia	6	0	0	0	0.00%	0.00%	0	0
Aruba	1	0	0	0	0.00%	0.00%	0	0
Bermuda	1	0	0	0	0.00%	0.00%	0	0
Cambodia	15	0	0	0	0.00%	0.00%	0	0
Cuba	1	0	0	0	0.00%	0.00%	0	0
Dominican Republic	3	0	0	0	0.00%	0.00%	0	0
El Salvador	1	0	0	0	0.00%	0.00%	0	0
Georgia	1	0	0	0	0.00%	0.00%	0	0

Guatemala	9	0	0	0	0.00%	0.00%	0	0
Iraq	2	0	0	0	0.00%	0.00%	0	0
Jamaica	1	0	0	0	0.00%	0.00%	0	0
Jordan	2	0	0	0	0.00%	0.00%	0	0
Kosovo	1	0	0	0	0.00%	0.00%	0	0
Kyrgyzstan	6	0	0	0	0.00%	0.00%	0	0
Liechtenstein	1	0	0	0	0.00%	0.00%	0	0
Lithuania	5	0	0	0	0.00%	0.00%	0	0
Luxembourg	2	0	0	0	0.00%	0.00%	0	0
Moldova	4	0	0	0	0.00%	0.00%	0	0
Mongolia	9	0	0	0	0.00%	0.00%	0	0
Myanmar	12	0	0	0	0.00%	0.00%	0	0
Namibia	15	0	0	0	0.00%	0.00%	0	0
Nauru	1	0	0	0	0.00%	0.00%	0	0
Paraguay	1	0	0	0	0.00%	0.00%	0	0
Qatar	1	0	0	0	0.00%	0.00%	0	0
San Marino	1	0	0	0	0.00%	0.00%	0	0
Suriname	14	0	0	0	0.00%	0.00%	0	0
Tunisia	14	0	0	0	0.00%	0.00%	0	0
Turkmenistan	1	0	0	0	0.00%	0.00%	0	0
Uruguay	1	0	0	0	0.00%	0.00%	0	0

Chart 2: Total Treatments/Country and Total New (Individuals)/Country

Analyzing the percentage individual athletes utilizing our care demonstrated a slight variation. However, some results are skewed due to the smaller number of athletes, but of the top 5 countries in utilization, averaged over 30% of their athletes requested care by the FICS delegation at TWG2025 (Graph 10).



Graph 10: Percentage individual athletes treated per country.

Presentation of Complaints:
We have continued to update our data collection at events to align with IOC reporting of medical services. This included questions to the athletes about when the injury occurs, injury location, type of injury, cause of injury, pain type, and specific round of the injury. This information provides further understanding of injuries treated at this event and informs us about areas that we can address.

- **When the injury occurred:**

Of the 1125 total treatments 539 (47.91%) completed this information. During the competition was the most common, followed by during training when the injury occurred (Chart 3).

When did the injury occur?	Total Athletes	Completed Data	% Completion
	1125	539	47.91%
During competition	214	19.02%	
During training	157	13.96%	
During warm-up	17	1.51%	
Other	151	13.42%	
No Data	586	52.09%	

Chart 3: When injury occurred.

- **Injury Location:**

A total of 47.91% completed this information identical to the above question. The abdomen / lower back / Lumbar spine was the most common anatomical area identified. The neck, Shoulder / Clavicle, Lower leg, and Chest / Ribs / Upper back followed respectively. This indicates the spine, shoulder, and lower leg where the most common anatomical areas of injury location (Chart 4).

Injury Location	Total Responses	% Responses to Total Responses n=1125
Abdomen / Lower back / Lumbar spine	322	28.62%
Achilles Tendon	5	0.44%
Ankle	30	2.67%
Chest / Ribs / Upper back	108	9.60%
Elbow	23	2.04%
Face	2	0.18%
Foot / Toes	18	1.60%
Forearm	5	0.44%
Hand / Fingers	6	0.53%
Head	1	0.09%
Hip / Groin	51	4.53%
Knee	33	2.93%
Lower Leg	51	4.53%
Neck	171	15.20%
Other	7	0.62%

Pelvis / Buttocks	38	3.38%
Shoulder / Clavicle	162	14.40%
Thigh	50	4.44%
Upper arm	9	0.80%
Wrist	16	1.42%
No Data	17	1.51%

Chart 4: Anatomical Area where injury occurred.

- **Type of Injury:**

A total of 47.91% completed this information identical to the above question. We integrated the IOC classification of types of injuries with the addition of "musculoskeletal dysfunction" to describe those athletes that presented with no injury but following examination indicated they had altered biomechanics requiring manual manipulation. Musculoskeletal dysfunction (71%) was the most common type of injury followed by Strain / muscle rupture / tear, Sprain, and Muscle cramp or spasm. This indicates that most athletes we treated did not have severe injuries and requested our treatment for biomechanical and muscle – tendon issues.

Type of injury	Total Responses	% Responses to Total Responses n=1125
Concussion	3	0.27%
Fracture	2	0.18%
Stress Fracture	1	0.09%
Other Bone Injury	4	0.36%
Dislocation / Subluxation	6	0.53%
Tendon Rupture	3	0.27%
Ligamentous Rupture with Instability	1	0.09%
Ligamentous Rupture without Instability	3	0.27%
Sprain	61	5.42%
Lesion meniscus or cartilage	3	0.27%
Strain / Muscle rupture / Tear	55	4.89%
Contusion / haematoma / bruise	3	0.27%
Tendinosis / tendinopathy	17	1.51%
Bursitis	0	0.00%
Laceration / Abrasion / Skin lesion	1	0.09%
Dental Injury / Broken Tooth	0	0.00%
Nerve Injury / Spinal Cord Injury	3	0.27%
Muscle Cramp or Spasm	51	4.53%
Others	11	0.98%
Musculoskeletal Dysfunction	803	71.38%
No Data	94	8.36%

Chart 5: Type of Injury.

- **Cause of Injury:**

A total of 47.91% completed this information identical to the above question. We asked these athletes to indicate how the injury occurred. The most common cause of injury reported was overuse of gradual onset (52%) followed by overuse of sudden onset (19%). This may be due to training or limited health care support; however, we did not specifically ask this question.

Cause of Injury	Total Responses	% Responses to Total Responses n=1125
Contact: another athlete	47	4.18%
Contact: moving object (e.g. ball)	5	0.44%
Contact: stagnant object (e.g. net)	14	1.24%
Equipment Failure	1	0.09%
Field of Play Conditions	2	0.18%
Non-Contact Trauma	40	3.56%
Others	53	4.71%
Overuse (gradual onset)	591	52.53%
Overuse (sudden onset)	213	18.93%
Recurrence of previous injury	20	1.78%
Weather conditions	3	0.27%
No Data	136	12.09%

Chart 6: Type of Injury.

- **Specific Onset:**

We questioned the athlete when the injury occurred. Unfortunately, the majority we were unable to gather this data set, however, of the responses we received most injuries occurred during the qualification rounds of the event. We hesitate to draw any conclusions on this data as the separation is minimal and the response rate is low.

Specify the Onset	Total Responses	% Responses to Total Responses n=1125
Qualification	86	7.64%
Quarter-Final	67	5.96%
Final	51	4.53%
No Data	921	81.87%

- **Pain Duration:**

Defining how long pain or injury has been present is important to understand the duration of the pain. Acute is usually sudden onset and within the last 6 weeks. Subacute is pain or injury greater than 6 weeks but less than 3 months. Chronic is usually greater than 3 months with Acute, Chronic is defined as an acute episode of a chronic condition. Our results indicate that most were Acute but closely followed by Chronic presentations.

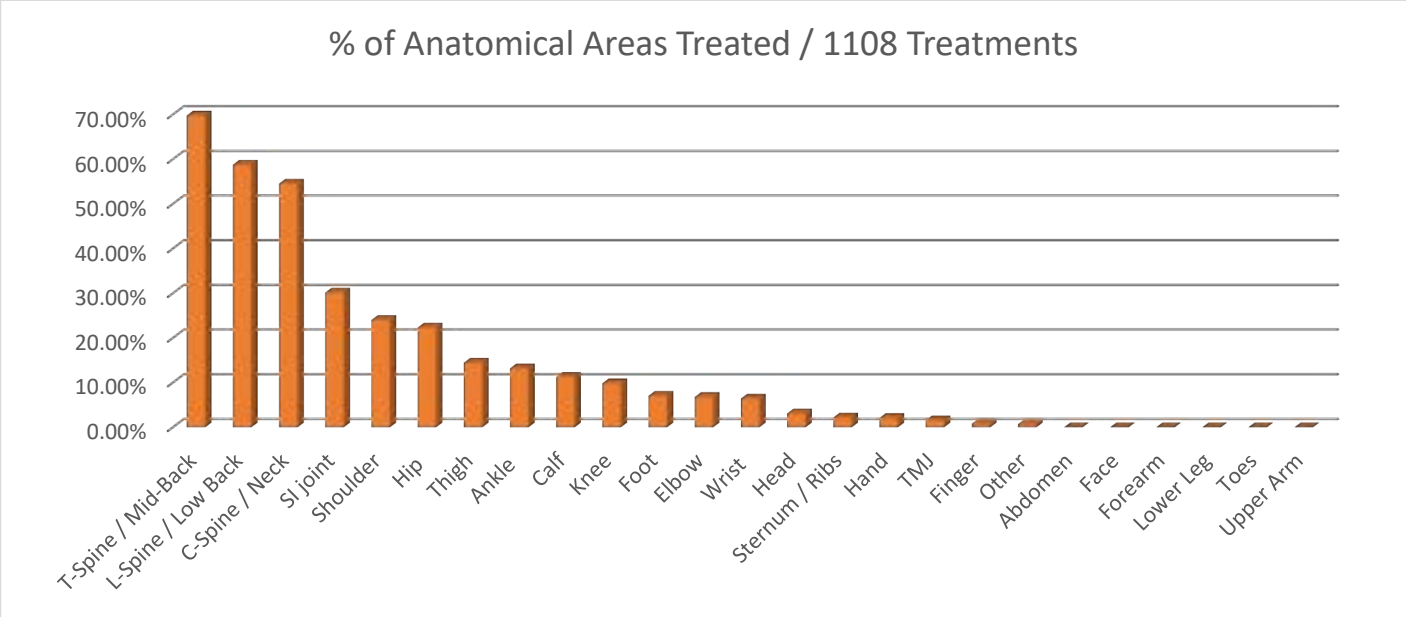
Pain Duration	Total Responses	% Responses to Total Responses n=1125
Acute	636	56.53%
Acute, Chronic	25	2.22%
Chronic	460	40.89%
Subacute (greater than 6 weeks, less than 3 months)	2	0.18%

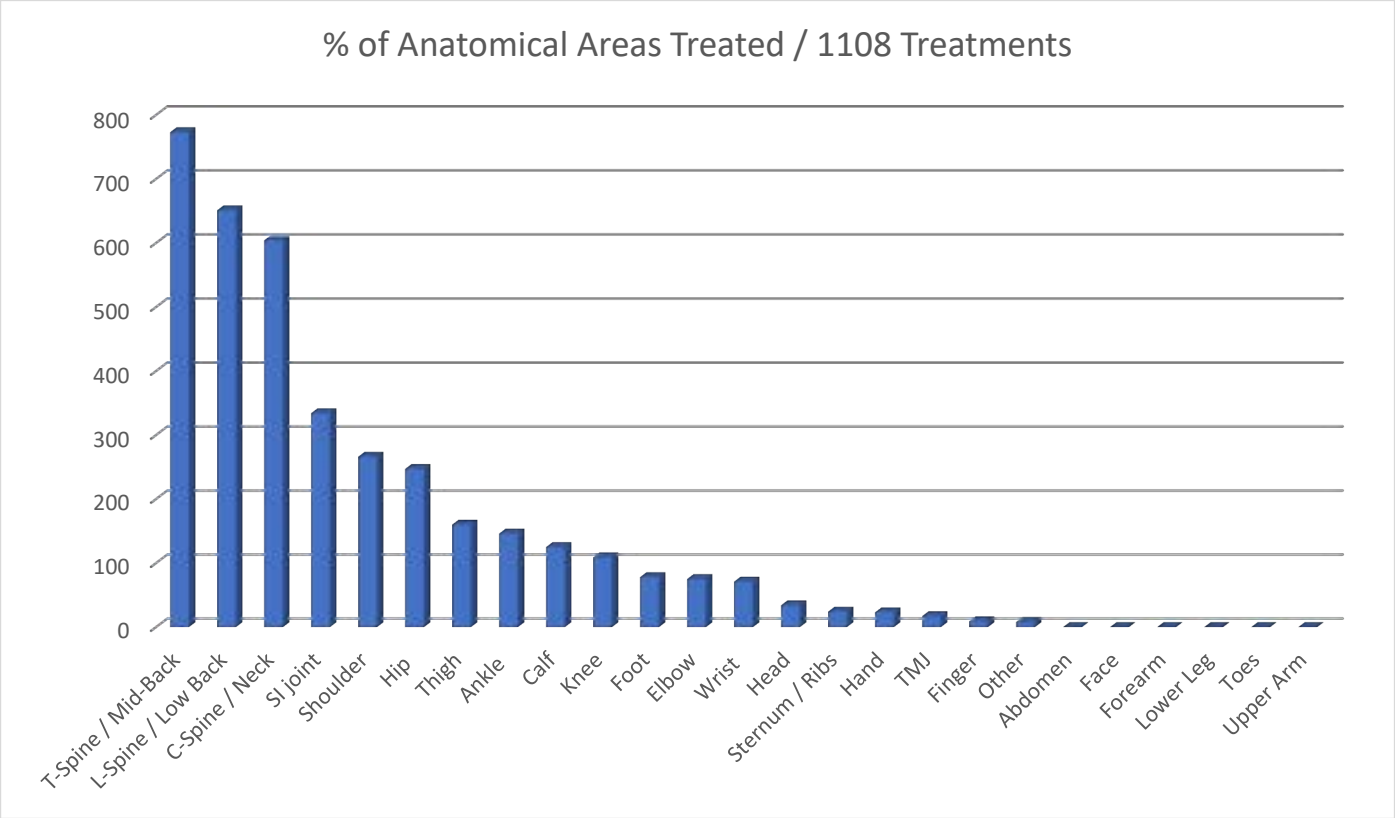
Athlete Treatment Data:

We collected data on the anatomical areas treated, types of treatment provided, return to play, if referral was facilitated, and their pre and post pain scores for each of the 1125 athletes we treated.

- **Anatomical Areas Treated:**

We collected data from 1108 (98%) of the 1125 athlete treatments regarding their anatomical areas treated. This information is helpful in understand the key areas that we addressed on the athletes. The primary area receiving treatment for athletes was the spine followed by the shoulder, hip, and, thigh. Since the spine is the primary stabilizer for movement this is not a surprising result, and low back pain is a very common problem in humans and athletes. However, it is evident that extremities are an important area receiving treatment.

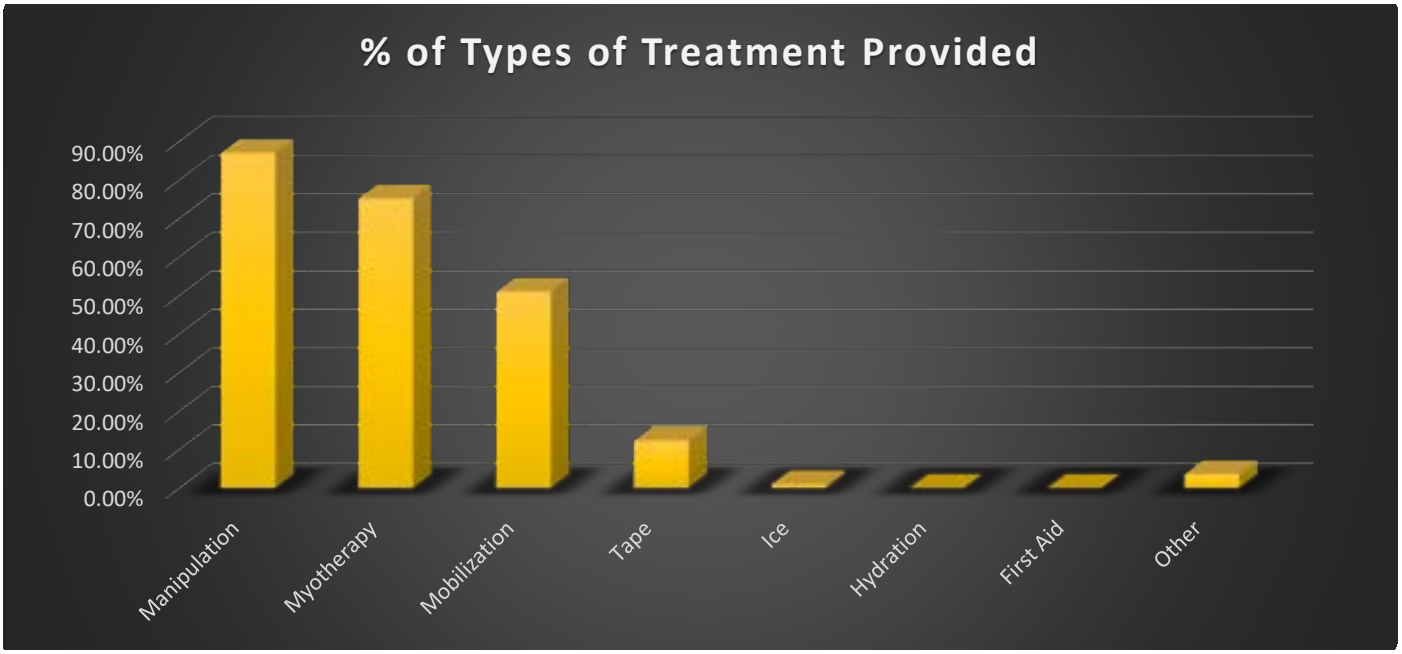



% of Anatomical Areas Treated / 1108 Treatments
800
700
600
500
400
300
200
100
0
T-Spine / Mid-Back
L-Spine / Low Back
C-Spine / Neck
SI joint
Shoulder
Hip
Thigh
Ankle
Calf
Knee
Foot
Elbow
Wrist
Head
Sternum / Ribs
Hand
TMJ
Finger
Other
Abdomen
Face
Forearm
Lower Leg
Toes
Upper Arm

Anatomical Area Treated	Total Responses	% Responses to Total Responses n=1108
T-Spine / Mid-Back	773	69.77%
L-Spine / Low Back	651	58.75%
C-Spine / Neck	604	54.51%
SI joint	334	30.14%
Shoulder	266	24.01%
Hip	247	22.29%
Thigh	160	14.44%
Ankle	146	13.18%
Calf	125	11.28%
Knee	109	9.84%
Foot	78	7.04%
Elbow	75	6.77%
Wrist	71	6.41%
Head	34	3.07%
Sternum / Ribs	24	2.17%
Hand	23	2.08%
TMJ	17	1.53%
Finger	9	0.81%
Other	8	0.72%
Abdomen	0	0.00%
Face	0	0.00%
Forearm	0	0.00%
Lower Leg	0	0.00%
Toes	0	0.00%
Upper Arm	0	0.00%

- **Types of Treatment:**

Analysis of the types of treatment the athletes received demonstrated that manipulation (to the joints to restore movement) and myotherapy (stretching, massage, deep tissue work, and soft tissue work) were the primary care delivered. Increasing the freedom of movement through soft tissue, biomechanics, and manipulation has been shown effective. The evidence from these games supports the fact that the athletes are requesting sports chiropractic care with strong benefits towards their preparation for competition and for their recovery after each competition.



Treatment Provided (Specific)	Total Responses	% Responses to Total Responses n=1125
Manipulation	980	87.11%
Myotherapy	847	75.29%
Mobilization	575	51.11%
Tape	140	12.44%
Ice	12	1.07%
Hydration	1	0.09%
First Aid	1	0.09%
Other	42	3.73%

- **Return to Activity:**

The attending sports chiropractor assessed the athlete to determine if they were able to return to their activity or they should not continue competition. Of the 1125 athletes treated, nearly 99% were able to continue to treat. This would indicate most of the athletes we treated did not have serious injuries which would preclude them from competition.

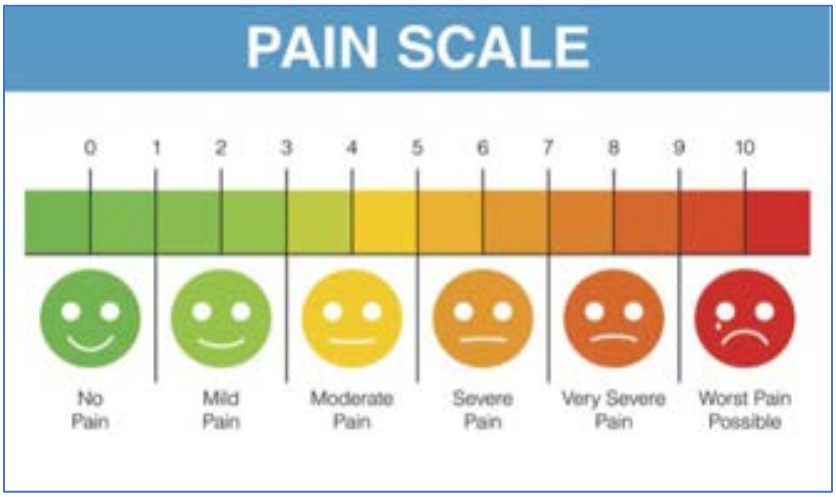
Returned to Activity	Total Responses	% Responses to Total Responses n=1125
Yes	1110	98.67%
No	15	1.33%

- **Referral to Medical Providers:**

The sports chiropractor also assessed if the athlete required referral to medical providers. Less than 1% of the athletes require referral to medical providers. However, it is essential this collaboration is available to fully support those athletes that require this referral.

Referral	Total Responses	% Responses to Total Responses n=1125
Yes	6	0.53%
No	857	76.18%
NA	262	23.29%

Changes Following Treatment: Everyone was asked to rate their pain or discomfort prior to their treatments. This method is commonly used to evaluate change following treatment or care. The athlete was asked to rate their pain or discomfort from 0 (no pain/discomfort) to 10 (worse pain they have ever experienced). The athletes were asked to then complete the same rating following their treatment. This provides information on their perceived improvement in pain or discomfort. From the 1125 treatments provided to the athletes, 100% completed the information.



The initial rating averaged **4.46** for the athletes. The post-treatment average rating was 1.29. This demonstrates a **3.17** average change or a **71.08%** improvement in their rating across the 1125 athletes that completed this rating. Additionally, 92% reported improvement in their pain scores following one treatment.

Research has shown has demonstrated that a 2 point or 30% improvement is associated with a positive clinical change and correlation to a positive global perception of change from a treatment. The data demonstrates that the average outcome of the 1125 treatments of athletes at TWG had a positive improvement in their reported pain following sports chiropractic care.

Pain Scores	
Athlete	**1125**
Pre NPS	4.46
Post NPS	1.29
	3.17
	71.08%

Improved	1037	**92.18%**
No Change	88	**7.82%**
Worse	6	**0.53%**

Change in NPS if Improved	
Ave Pre NPS	4.72
Ave Post NPS	1.28
	3.44
	72.88%

Conclusion:
The athletes at TWG2025 sought the care of the FICS sports chiropractors at a high rate of utilization. They represented most sports and countries. There is evidence of utilization by NOC/NGB with high rates and to countries that may not have full medical services thus providing equability to all athletes. The spine was the primary area treated with manipulation and myotherapy, the primary form of treatment. The athletes perceived a strong global change and were very satisfied with their care from the FICS sports chiropractors.

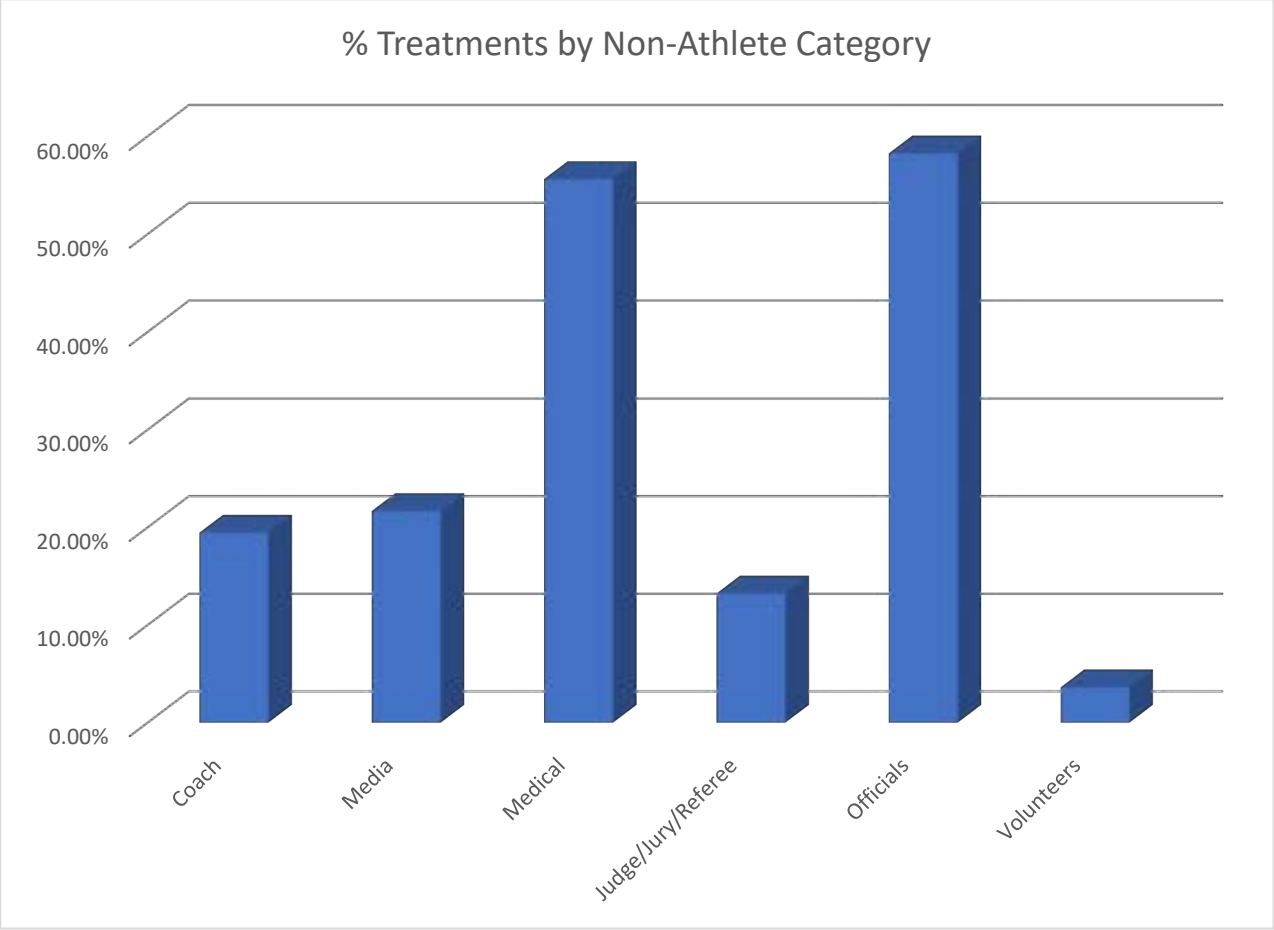
TWG Accredited Non-Athletes:

Data was captured on the treatments provided to the accredited non-athletes that requested care by the FICS sports chiropractors. The accredited non-athletes are composed of officials, coaches, Judges/Jury, medical, and volunteer.

There were **2739** accredited non-athletes at TWG2025 and **25,201** accredited volunteers. We provided **1209** total treatments or **44.14%** to the non-athlete group excluding the volunteers. Of the 1209 total treatments, **812 (29.65%)** were to new individuals and **397 (14.49%)** follow-up treatments. The gender distribution of the 812 individual non-athletes was **404 (51.07%) males and 387 (48.93%) females.** Understanding the distribution of the non-athlete group will assist us in our planning and is evidence of further support from the delegation to TWG2025. We hope this is an added benefit to the support staff and volunteers.

The accredited non-athletes represented various groups that supported TWG2025. We first categorized into 6 accreditation category (Coach, Media, Medical, Judge/Jury, Official, Volunteer).

There were 25,201 accredited volunteers at TWG2025. We provided **1084** total treatments or **4.30%** to this group. Of the 1084 total treatments, **911 (3.61%)** were to new individuals and **173 (0.69%)** follow-up treatments. The following is the distribution of treatments for each group.



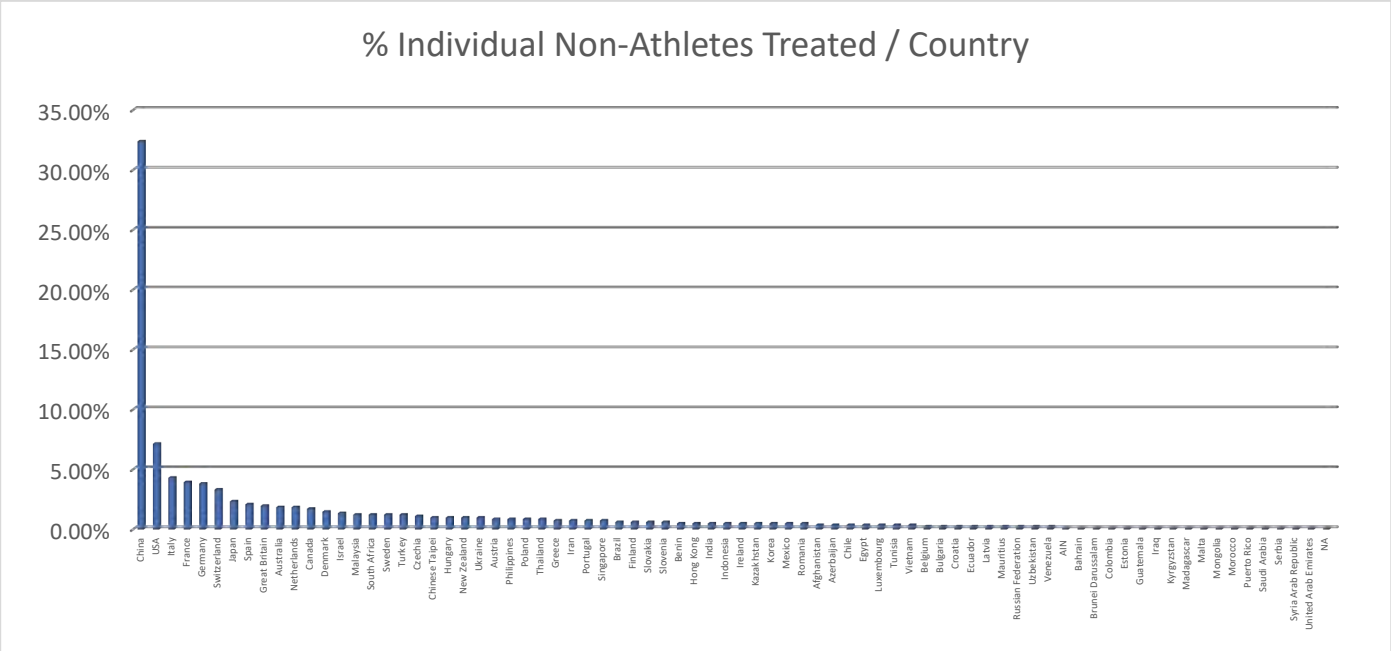
	Accredited Non-Athletes	**New Non-Athlete**	%New NonAth/Total Accredited NonAth	**Follow-up Treatments**	**Total Treatments**
Coach	1208	235	19.45%	85	320
Media	120	26	21.67%	4	30
Medical	196	109	55.61%	54	163
Judge/Jury/Referee	590	78	13.22%	56	134
Officials	625	364	58.24%	198	562
Volunteers	25201	911	3.61%	173	1084

The results demonstrate good utilization from officials and medical staff. FICS strives to integrate with the other medical services during an event and to see so many medical individuals request our care is a very positive result. Additionally, the number of coaches that requested care is helpful to support them during the games and experience and understand the care we are providing their athletes.

To understand further the large group of officials and volunteers we treated, we further differentiated the treatment to the non-athletes by the organizations and sports they represented. This provided clarity especially for the officials, volunteers and sports that requested our care. This is evidence that an added benefit of the FICS delegation is supporting all aspects of the games including those individuals that are responsible for organizing and promoting this event.

Countries of Non-Athletes:

The country distribution of athletes that requested our care demonstrated China, USA, Italy, France, Germany, Switzerland, and Japan as the top 7 nations.



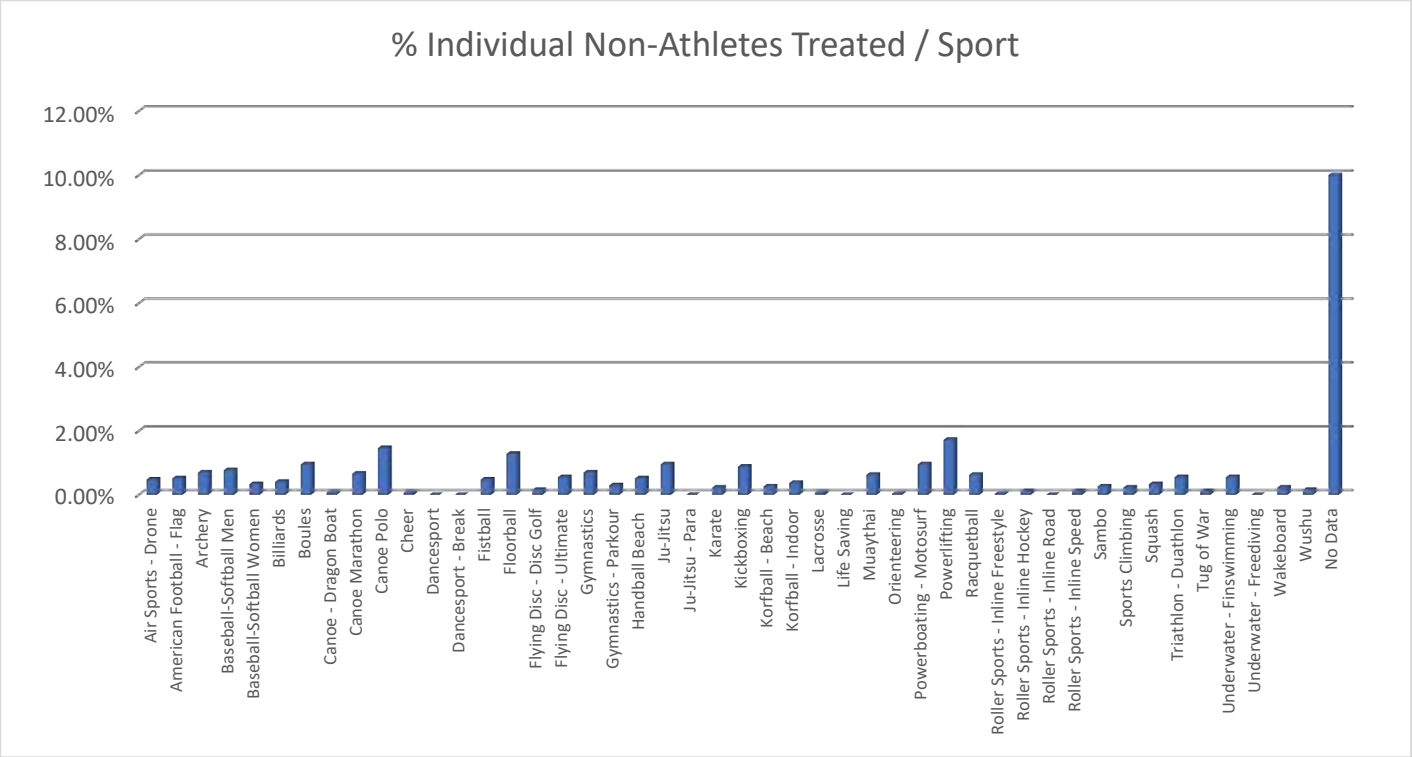
Country	New Non Athlete	Follow-up Treatments	Total Treatments	Total New NonAthletes/ Individual NonAthletes	% of Total NonAthletes Treated	Male	Female	NA
AIN	1	0	1	0.12%	0.08%	0	1	0
Afghanistan	3	1	4	0.37%	0.33%	3	0	0
Algeria	0	0	0	0.00%	0.00%	0	0	0
Argentina	0	0	0	0.00%	0.00%	0	0	0
Armenia	0	0	0	0.00%	0.00%	0	0	0
Aruba	0	0	0	0.00%	0.00%	0	0	0
Australia	15	10	25	1.85%	2.07%	9	6	0
Austria	7	3	10	0.86%	0.83%	3	4	0
Azerbaijan	3	2	5	0.37%	0.41%	2	1	0
Bahrain	1	0	1	0.12%	0.08%	1	0	0
Belgium	2	2	4	0.25%	0.33%	1	1	0
Benin	4	2	6	0.49%	0.50%	3	1	0
Bermuda	0	0	0	0.00%	0.00%	0	0	0

Bolivia	0	0	0	0.00%	0.00%	1	1	0
Brazil	5	1	6	0.62%	0.50%	3	2	0
Brunei Darussalam	1	0	1	0.12%	0.08%	1	0	0
Bulgaria	2	0	2	0.25%	0.17%	2	0	0
Cambodia	0	0	0	0.00%	0.00%	0	0	0
Cameroon	0	0	0	0.00%	0.00%	0	0	0
Canada	14	16	30	1.72%	2.48%	9	5	0
Chile	3	1	4	0.37%	0.33%	2	1	0
China	263	70	333	32.39%	27.54%	136	119	8
Chinese Taipei	8	0	8	0.99%	0.66%	3	5	0
Colombia	1	0	1	0.12%	0.08%	0	1	0
Costa Rica	0	0	0	0.00%	0.00%	0	0	0
Côte d'Ivoire	0	0	0	0.00%	0.00%	0	0	0
Croatia	2	2	4	0.25%	0.33%	1	1	0
Cuba	0	0	0	0.00%	0.00%	0	0	0
Cyprus	0	0	0	0.00%	0.00%	0	0	0
Czechia	9	4	13	1.11%	1.08%	7	2	0
Denmark	12	9	21	1.48%	1.74%	8	3	1
Dominican Republic	0	0	0	0.00%	0.00%	0	0	
Ecuador	2	0	2	0.25%	0.17%	0	2	
Egypt	3	0	3	0.37%	0.25%	3	0	
El Salvador	0	0	0	0.00%	0.00%	0	0	
Estonia	1	0	1	0.12%	0.08%	0	1	
Finland	5	2	7	0.62%	0.58%	4	1	
France	32	13	45	3.94%	3.72%	26	6	
Georgia	0	0	0	0.00%	0.00%	0	0	
Germany	31	34	65	3.82%	5.38%	13	10	
Great Britain	16	6	22	1.97%	1.82%	10	6	
Greece	6	3	9	0.74%	0.74%	6	0	
Guatemala	1	0	1	0.12%	0.08%	1	0	
Hong Kong	4	2	6	0.49%	0.50%	3	1	
Hungary	8	3	11	0.99%	0.91%	6	2	
India	4	2	6	0.49%	0.50%	3	1	
Indonesia	4	0	4	0.49%	0.33%	0	4	
Iran	6	0	6	0.74%	0.50%	4	2	
Iraq	1	0	1	0.12%	0.08%	1	0	
Ireland	4	4	8	0.49%	0.66%	4	0	
Israel	11	6	17	1.35%	1.41%	8	3	

Italy	35	20	55	4.31%	4.55%	29	6	
Jamaica	0	0	0	0.00%	0.00%	0	0	
Japan	19	6	25	2.34%	2.07%	14	5	
Jordan	0	0	0	0.00%	0.00%	0	0	
Kazakhstan	4	0	4	0.25%	0.33%	3	1	
Korea	4	2	6	0.49%	0.50%	4	0	
Kosovo	0	0	0	0.00%	0.00%	0	0	
Kuwait	0	0	0	0.00%	0.00%	0	0	
Kyrgyzstan	1	0	1	0.12%	0.08%	1	0	
Latvia	2	0	2	0.25%	0.17%	1	1	
Lebanon	0	0	0	0.00%	0.00%	0	0	
Liechtenstein	0	0	0	0.00%	0.00%	0	0	
Lithuania	0	0	0	0.00%	0.00%	0	0	
Luxembourg	3	0	3	0.37%	0.25%	3	0	
Madagascar	1	0	1	0.12%	0.08%	1	0	
Malaysia	10	8	18	1.23%	1.49%	6	4	
Malta	1	0	1	0.12%	0.08%	0	1	
Mauritius	2	1	3	0.25%	0.25%	2	0	
Mexico	4	2	6	0.49%	0.50%	1	3	
Moldova	0	0	0	0.00%	0.00%	0	0	
Mongolia	1	0	1	0.12%	0.08%	1	0	
Montenegro	0	0	0	0.00%	0.00%	0	0	
Morocco	1	1	2	0.12%	0.17%	1	0	
Myanmar	0	0	0	0.00%	0.00%	0	0	
Namibia	0	0	0	0.00%	0.00%	0	0	
Nauru	0	0	0	0.00%	0.00%	0	0	
Netherlands	15	16	31	1.85%	2.56%	8	7	
New Zealand	8	17	25	0.99%	2.07%	4	4	
Nigeria	0	0	0	0.00%	0.00%	0	0	
Norway	0	0	0	0.00%	0.00%	0	0	
Pakistan	0	0	0	0.00%	0.00%	0	0	
Panama	0	0	0	0.00%	0.00%	0	0	
Paraguay	0	0	0	0.00%	0.00%	0	0	
Peru	0	0	0	0.00%	0.00%	0	0	
Philippines	7	0	7	0.86%	0.58%	4	3	
Poland	7	3	10	0.86%	0.83%	3	4	
Portugal	6	2	8	0.74%	0.66%	3	3	
Puerto Rico	1	0	1	0.12%	0.08%	1	0	
Qatar	0	0	0	0.00%	0.00%	0	0	
Romania	4	3	7	0.49%	0.58%	2	2	

Russian Federation	2	9	11	0.25%	0.91%	0	2	
San Marino	0	0	0	0.00%	0.00%	0	0	
Saudi Arabia	1	0	1	0.12%	0.08%	1	0	
Serbia	1	0	1	0.12%	0.08%	1	0	
Singapore	6	2	8	0.74%	0.66%	5	1	
Slovakia	5	2	7	0.62%	0.58%	4	1	
Slovenia	5	2	7	0.62%	0.58%	3	2	
South Africa	10	4	14	1.23%	1.16%	7	3	
Spain	17	4	21	2.09%	1.74%	12	5	
Suriname	0	0	0	0.00%	0.00%	0	0	
Sweden	10	4	14	1.23%	1.16%	7	3	
Switzerland	27	31	58	3.33%	4.80%	23	4	
Syria Arab Republic	1	0	1	0.12%	0.08%	1	0	
Thailand	7	1	8	0.86%	0.66%	3	4	
Tunisia	3	0	3	0.37%	0.25%	2	1	
Turkey	10	7	17	1.23%	1.41%	10	0	
Turkmenistan	0	0	0	0.00%	0.00%	0	0	
Ukraine	8	3	11	0.99%	0.91%	5	3	
United Arab Emirates	1	0	1	0.12%	0.08%	0	1	
Uruguay	0	0	0	0.00%	0.00%	0	0	
USA	58	43	101	7.14%	8.35%	33	25	
Uzbekistan	2	2	4	0.25%	0.33%	2	0	
Venezuela	2	1	3	0.25%	0.25%	1	1	
Vietnam	3	1	4	0.37%	0.33%	1	2	
Virgin Islands	0	0	0	0.00%	0.00%	0	0	
NA	1	3	4	0.12%	0.33%	1	3	

Non-Athlete Representing Sport:



Sport	New NonAthlete	Follow-up Treatments	Total Treatments	Total New NonAthletes/ Individual NonAthletes	% of Total NonAthletes Treated	Male	Female	NA
Air Sports - Drone	13	1	14	0.47%	1.08%	8	5	0
American Football - Flag	14	3	17	0.51%	1.16%	10	4	0
Archery	19	3	22	0.69%	1.57%	9	9	1
Baseball-Softball Men	21	10	31	0.77%	1.74%	20	1	0
Baseball-Softball Women	9	9	18	0.33%	0.74%	0	9	0
Billiards	11	5	16	0.40%	0.91%	9	2	0
Boules	26	14	40	0.95%	2.15%	17	9	0
Canoe - Dragon Boat	2	2	4	0.07%	0.17%	1	1	0
Canoe Marathon	18	3	21	0.66%	1.49%	12	6	0
Canoe Polo	40	9	49	1.46%	3.31%	19	21	0
Cheer	2	1	3	0.07%	0.17%	0	3	0
Dancesport	0	0	0	0.00%	0.00%	0	0	0
Dancesport - Break	0	0	0	0.00%	0.00%	0	0	0
Fistball	13	12	25	0.47%	1.08%	5	8	0
Floorball	35	34	69	1.28%	2.89%	24	10	1
Flying Disc - Disc Golf	4	0	4	0.15%	0.33%	4	0	0

Flying Disc - Ultimate	15	5	20	0.55%	1.24%	6	9	0
Gymnastics	19	7	26	0.69%	1.57%	10	9	0
Gymnastics - Parkour	8	2	10	0.29%	0.66%	5	3	0
Handball Beach	14	20	34	0.51%	1.16%	11	3	0
Ju-Jitsu	26	5	31	0.95%	2.15%	18	8	0
Ju-Jitsu - Para	0	0	0	0.00%	0.00%	0	0	0
Karate	6	0	6	0.22%	0.50%	3	3	0
Kickboxing	24	6	30	0.88%	1.99%	22	2	0
Korfball - Beach	7	3	10	0.26%	0.58%	2	5	0
Korfball - Indoor	10	5	15	0.37%	0.83%	5	5	0
Lacrosse	2	2	4	0.07%	0.17%	1	1	0
Life Saving	0	0	0	0.00%	0.00%	0	0	0
Muaythai	17	11	28	0.62%	1.41%	13	4	0
Orienteering	1	1	2	0.04%	0.08%	1	0	0
Powerboating - Motosurf	26	11	37	0.95%	2.15%	16	9	1
Powerlifting	47	20	67	1.72%	3.89%	40	7	0
Racquetball	17	12	29	0.62%	1.41%	12	5	0
Roller Sports - Inline Freestyle	1	1	2	0.04%	0.08%	1	1	0
Roller Sports - Inline Hockey	3	1	4	0.11%	0.25%	3	0	0
Roller Sports - Inline Road	0	0	0	0.00%	0.00%	0	0	0
Roller Sports - Inline Speed	3	0	3	0.11%	0.25%	2	1	0
Sambo	7	8	15	0.26%	0.58%	6	1	0
Sports Climbing	6	4	10	0.22%	0.50%	4	2	0
Squash	9	9	18	0.33%	0.74%	7	2	0
Triathlon - Duathlon	15	1	16	0.55%	1.24%	7	8	0
Tug of War	3	1	4	0.11%	0.25%	3	0	0
Underwater - Finswimming	15	4	19	0.55%	1.24%	8	7	0
Underwater - Freediving	0	0	0	0.00%	0.00%	0	0	0
Wakeboard	6	2	8	0.22%	0.50%	5	1	0
Wushu	4	0	4	0.15%	0.33%	4	0	0
No Data	274	150	424	10.00%	22.66%	159	109	6

Presentation of Complaints:

We have continued to update our data collection at events to align with IOC reporting of medical services. This included questions to the non-athletes about injury location, type of injury, cause of injury, pain type, and specific round of the injury. This information provides further understanding of injuries treated at this event and informs us about areas that we can address.

- **Injury Location:**

A total of 47.91% completed this information identical to the above question. The neck and abdomen / lower back / Lumbar spine was the most common anatomical areas identified. The shoulder / Clavicle, and Chest / Ribs / Upper back followed respectively. This indicates the spine, and shoulder, where the most common anatomical areas of injury are located.

Injury Location	Number Reported	% of Anatomical area Reported of Total Treatments
Abdomen / Lower back / Lumbar spine	591	25.77%
Achilles Tendon	11	0.48%
Ankle	35	1.53%
Chest / Ribs / Upper back	196	8.55%
Elbow	23	1.00%
Face	4	0.17%
Foot / Toes	15	0.65%
Forearm	6	0.26%
Hand / Fingers	5	0.22%
Head	15	0.65%
Hip / Groin	35	1.53%
Knee	64	2.79%
Lower Leg	32	1.40%
Neck	631	27.52%
Other	18	0.78%
Pelvis / Buttocks	52	2.27%
Shoulder / Clavicle	261	11.38%
Thigh	15	0.65%
Upper arm	11	0.48%
Wrist	16	0.70%
No Data	257	11.21%

Anatomical Area where injury occurred.

- **Type of Injury:**

We integrated the IOC classification of types of injuries with the addition of "musculoskeletal dysfunction" to describe those athletes that presented with no injury but following examination indicated they had altered biomechanics requiring manual manipulation. Musculoskeletal dysfunction (74%) was the most common type of injury followed by Muscle cramp or spasm, Strain / muscle rupture / tear, and Tendinosis / Tendinopathy. This indicates that most athletes we treated did not have severe injuries and requested our treatment for biomechanical and muscle – tendon issues.

Type of injury	Number Reported	% Reported / Total Treated	% Completion = 86.18%
Concussion	0	0.00%	
Fracture	3	0.13%	
Stress Fracture	2	0.09%	
Other Bone Injury	0	0.00%	
Dislocation / Subluxation	5	0.22%	
Tendon Rupture	0	0.00%	
Ligamentous Rupture with Instability	5	0.22%	
Ligamentous Rupture without Instability	4	0.17%	
Sprain	28	1.22%	
Lesion meniscus or cartilage	7	0.31%	
Strain / Muscle rupture / Tear	66	2.88%	
Contusion / haematoma / bruise	0	0.00%	
Tendinosis / tendinopathy	28	1.22%	
Bursitis	11	0.48%	
Laceration / Abrasion / Skin lesion	0	0.00%	
Dental Injury / Broken Tooth	0	0.00%	
Nerve Injury / Spinal Cord Injury	14	0.61%	
Muscle Cramp or Spasm	75	3.27%	
Others	37	1.61%	
Musculoskeletal Dysfunction	1691	73.75%	
No Data	317	13.82%	

Type of Injury.

- **Cause of Injury:**

A total of 2293 completed this information identical to the above question. We asked these non-athletes to indicate how the injury occurred. The most common cause of injury reported was overuse of gradual onset (57%) followed by overuse of sudden onset (12%). This may be due to training or limited health care support; however, we did not specifically ask this question.

Cause of Injury	n=2293	% Reported / Total Treated
Contact: another athlete	2	0.09%
Contact: moving object (e.g. ball)	5	0.22%
Contact: stagnant object (e.g. net)	6	0.26%
Equipment Failure	6	0.26%
Field of Play Conditions	7	0.31%
Non-Contact Trauma	45	1.96%
Others	159	6.93%
Overuse (gradual onset)	1317	57.44%
Overuse (sudden onset)	290	12.65%
Recurrence of previous injury	38	1.66%
Weather conditions	5	0.22%
Violation of rules (foul play)	1	0.04%
No Data	412	17.97%

Cause of Injury.

- **Specific Onset:**

We questioned the athlete when the injury occurred. Unfortunately, the majority of we were unable to gather this data set, however, of the responses we received most injuries occurred during the final rounds of the event. We hesitate to draw any conclusions on this data as the separation is minimal and the response rate is low.

Specify the Round	n=	2293
Qualification	30	1.31%
Quarter-Final	34	1.48%
Final	60	2.62%
No Data	2169	94.59%

- **Pain Duration:**

Defining how long pain or injury has been present is important to understand the duration of the pain. Acute is usually sudden onset and within the last 6 weeks. Subacute is pain or injury greater than 6 weeks but less than 3 months. Chronic is usually greater than 3 months with Acute, Chronic is defined as an acute episode of a chronic condition. Our results indicate that most were Chronic but closely followed by Acute presentations.

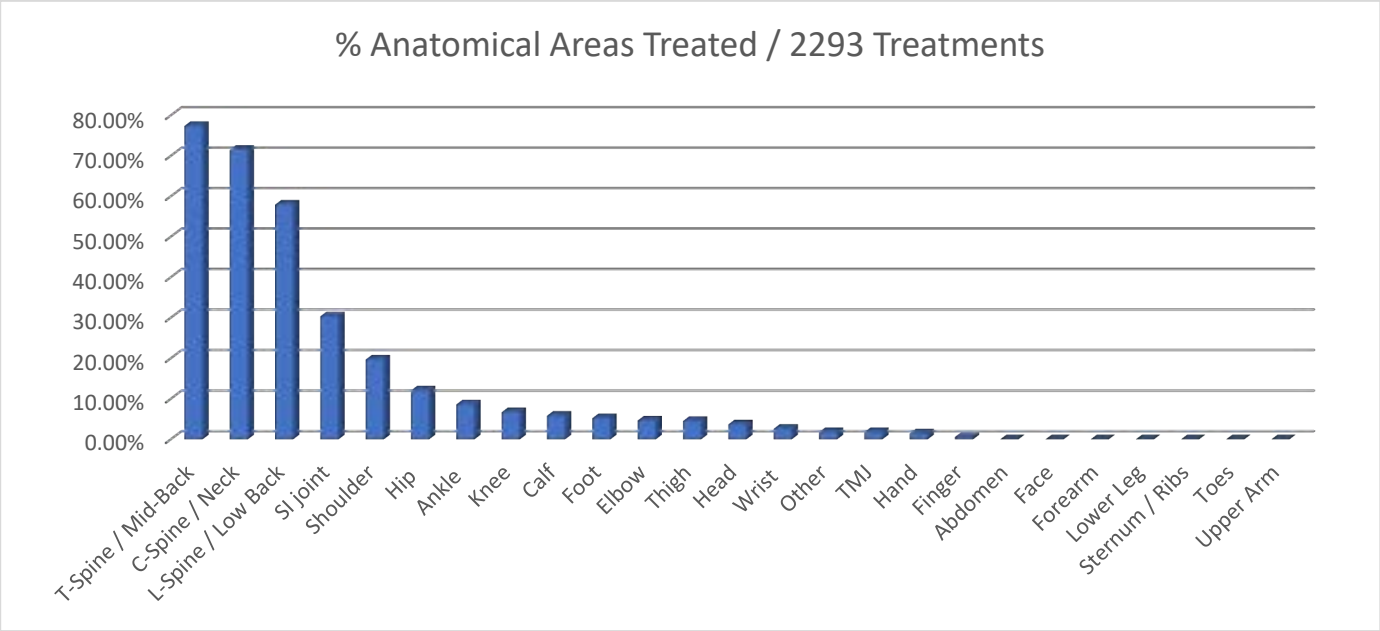
Pain Duration	n=	2293
Acute	938	40.91%
Acute, Chronic	26	1.13%
Chronic	1285	56.04%
Subacute (greater than 6 weeks, less than 3 months)	28	1.22%
No Data	16	0.70%

Non-Athlete Treatment Data:

We collected data on the anatomical areas treated, types of treatment provided, return to play, if referral was facilitated, and their pre and post pain scores for each of the 2293 non-athletes we treated.

- **Anatomical Areas Treated:**

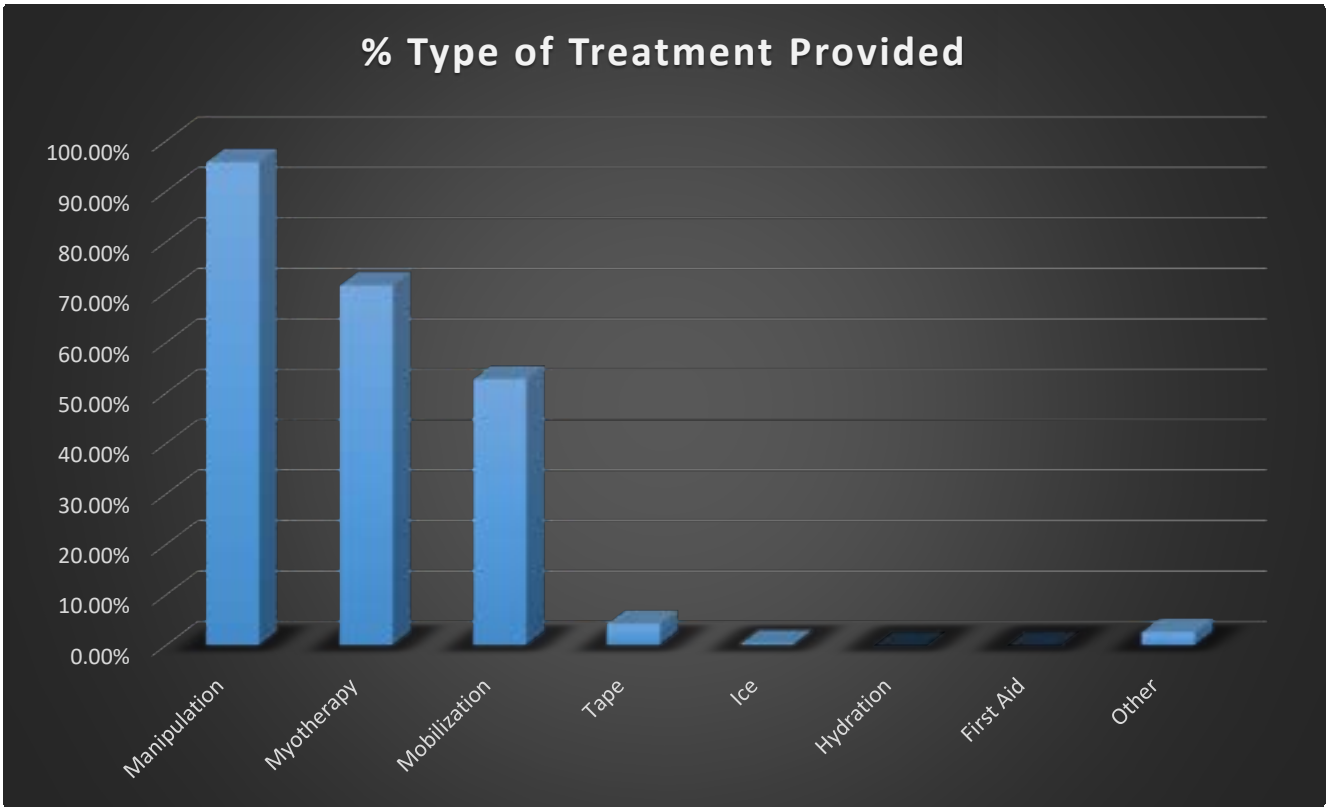
We collected data from 100% of the 2293 non-athlete treatments regarding their anatomical areas treated. This information is helpful in understand the key areas that we addressed on the athletes. The primary area receiving treatment for athletes was the spine followed by the shoulder, hip, and ankle. Since the spine is the primary stabilizer for movement this is not a surprising result, and low back pain is a very common problem in humans and athletes. However, it is evident that extremities are an important area for receiving treatment.



Anatomical Area Treated	n=	2293
T-Spine / Mid-Back	1774	77.37%
C-Spine / Neck	1639	71.48%
L-Spine / Low Back	1328	57.92%
SI joint	696	30.35%
Shoulder	451	19.67%
Hip	276	12.04%
Ankle	197	8.59%
Knee	153	6.67%
Calf	133	5.80%
Foot	119	5.19%
Elbow	106	4.62%
Thigh	103	4.49%
Head	84	3.66%
Wrist	59	2.57%
Other	40	1.74%
TMJ	40	1.74%
Hand	33	1.44%
Finger	13	0.57%
Abdomen	0	0.00%
Face	0	0.00%
Forearm	0	0.00%
Lower Leg	0	0.00%
Sternum / Ribs	0	0.00%
Toes	0	0.00%
Upper Arm	0	0.00%

- **Types of Treatment:**

Analysis of the types of treatment the non-athletes received demonstrated that manipulation (to the joints to restore movement) and myotherapy (stretching, massage, deep tissue work, and soft tissue work) were the primary care delivered. Increasing the freedom of movement through soft tissue, biomechanics, and manipulation has been shown effective. The evidence from these games supports the fact that the non-athletes are requesting sports chiropractic care with strong benefits towards their preparation for supporting their activities during TWG.



Treatment Provided (Specific)	n=	2293
Manipulation	2198	95.86%
Myotherapy	1638	71.43%
Mobilization	1212	52.86%
Tape	98	4.27%
Ice	9	0.39%
Hydration	0	0.00%
First Aid	1	0.04%
Other	61	2.66%

- **Return to Activity:**

The attending sports chiropractor assessed the non-athlete to determine if they were able to return to their activity. Of the 2293 athletes treated, 98% were able to continue to treat. This would indicate most of the non-athletes we treated did not have serious injuries which would preclude them from their activities.

Returned to Activity	n=	2293
Yes	2251	98.17%
No	22	0.96%
No Data	20	0.87%

- **Referral to Medical Providers:**

The sports chiropractor also assessed if the non-athlete required referral to medical providers. Less than 1% of the athletes require referral to medical providers. However, it is essential this collaboration is available to fully support those non-athletes that require this referral.

Referral	Total Responses	% Responses to Total Responses n=2293
Yes	6	0.53%
No	1420	126.22%
NA	865	76.89%

Changes Following Treatment:

Everyone was asked to rate their pain or discomfort prior to their treatments. This method is commonly used to evaluate change following treatment or care. The non-athlete was asked to rate their pain or discomfort from 0 (no pain/discomfort) to 10 (worse pain they have ever experienced). The non-athletes were asked to then complete the same rating following their treatment. This provides information on their perceived improvement in pain or discomfort. From 2293 treatments provided to the non-athletes, 2220 **(96.82%)** completed the form.

It is interesting to note that the non-athletes had a similar average initial pre-treatment rating (4.12) compared to the athletes rating (4.46). The post-treatment rating was also similar with the average post-treatment rating of non-athletes was 0.95 and athletes was 1.29. The percentage of change was 92.21% for the non-athletes and 92.18% for the athletes.

Clinically, a 30% change in this rating is significant for the individual's perceived improvement and has correlation to less pain and better function.

Pain Scores	Completed		% Completion
Non-Athlete & Volunteers	**2220**	2293	96.82%
Pre NPS	4.12		
Post NPS	0.95		
	3.17		
	76.94%		

Improved	2047	**92.21%**
No Change	163	**7.34%**
Worse	10	**0.45%**

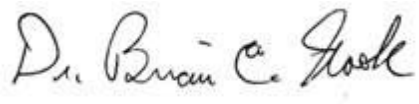
Change in NPS if Improved	
Ave Pre NPS	4.37
Ave Post NPS	0.93
	3.44
	78.72%

Conclusion:

The non-athletes at TWG2025 sought the care of the FICS sports chiropractors at a high rate of utilization. They represented all sports and categories of the non-athlete accreditation. The spine was the primary area treated with manipulation and myotherapy was the primary form of treatment. They reported a significant change in their pain score following their treatment.

It is our hope that these reports will be viewed as positive feedback on a great relationship with the IWGA. We look forward to furthering our association with the IWGA and they are an asset to the IWGA and the Games. We make ourselves available for further discussion and resolution.

Yours truly,



Dr Brian C Nook
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FICS IWGA Chef de Mission WG 2025
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