

# An Inventory of Women’s Sports Medicine Programs across the United States

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## INTRODUCTION:

A rise in women’s athletic participation, as well as research demonstrating higher incidence of musculoskeletal issues in women athletes, has led to increased focus on offering women’s sports medicine (WSM) specialty services in healthcare systems and institutions across the country. The first WSM program within an orthopaedic department was established 25 years ago. Since then, comprehensive WSM programs have continued to arise and evolve. The purpose of this study is to assess the current landscape of WSM centers in the United States. Specifically, the study aims to determine the current number of WSM centers and their program characteristics, identify the most represented subspecialties within their programs, and develop recommendations for emerging programs.

## METHODS:

This study was designed as a scientific study with a concurrent review of current literature. The primary investigation was performed via a detailed search of identified healthcare databases using specified search terms. The US News and World Reports Best Hospitals for Orthopaedics, listing 1,670 hospitals in the United States, was utilized as the primary reference. This list was then cross referenced with Becker’s Hospital Review’s list of Top 100 Orthopaedic Hospitals and FREIDA™ AMA Residency and Fellowship Programs Database. Each program or hospital website identified from these databases was searched using the following search terms: ‘women’ AND ‘sports medicine.’ If a WSM program was identified on the website, information collected was analyzed to determine the overall number of WSM centers, regional distribution, and the subspecialties included in these programs for the care of active women.

## RESULTS:

Of the 1,676 healthcare centers reviewed, 29 WSM programs were identified. An additional 8 health systems had websites which specifically indicated services for “women’s sports medicine services,” “care for the female and pregnant athlete,” “women’s health,” or “care for female athlete triad,” however, no additional details regarding a WSM program or subspecialty services were reported. A total of 18 subspecialties were identified across WSM programs. The mean number of specialties offered within a program was 5, with 15 programs listing more than 5 subspecialties. The most common subspecialties were Orthopaedic Surgery (96.6%), Primary Care Sports Medicine (65.5%), Physical Therapy (65.5%), Nutrition (62.1%), and Physical Medicine and Rehabilitation (62.1%) (Table 1). The Northeast region has the highest concentration of WSM programs (n=13), with New York State having the most WSM programs (n=5) (Figure 1). Of the identified programs, 12 listed a specific program leader. The most common specialty among program leadership was Orthopaedic Surgery Sports Medicine. Specialties involved in a WSM program fell into three broad categories: Musculoskeletal Pathology, Performance, and Nutrition. This interdisciplinary collaboration between these specialties is illustrated in Figure 2.

**DISCUSSION AND CONCLUSION:** WSM programs continue to develop within healthcare centers across the United States. These programs and their contributions to the care of active women and the field of sports medicine are an important area of study. A comprehensive WSM program should ideally incorporate a variety of specialties that provide holistic care in the preventative, acute, and long-term management of active women and athletes and address fundamental pillars of performance, nutrition, and musculoskeletal pathology.

Table 1. Distribution of Subspecialties Amongst Identified WSM Programs

Specialty Offered	Number of programs (n) offering specialty	% of programs offering specialty
Orthopaedics	28	96.6
Primary Care Sports Medicine	19	65.5
Physical Therapy	19	65.5
Nutrition	18	62.1
Physical Medicine and Rehabilitation	18	62.1
Psychology or Psychiatry	14	48.3
Gynecology and Obstetrics	10	34.5
Endocrinology	8	27.6
Athletic Training	6	20.7
Exercise Physiology	6	20.7
Bone Health	5	17.2
Cardiology	5	17.2
Rheumatology	4	13.8
Neurology	3	10.3
Radiology	3	10.3
Other*	7	24.1
Bariatric Surgery (2)		
Internal Medicine (3)		
Gastroenterology		
Urogynecology (1)		
Occupational Therapy (1)		
Sports Conditioning (1)		
Social Services (1)		

Figure 1: Distribution of Women’s Sports Medicine Programs Across the United States

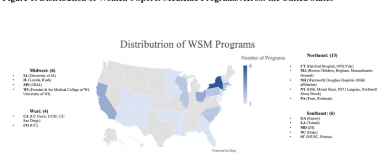


Figure 3: Women’s Sports Medicine: The Integrated Approach to the Care of Active Girls and Women

