Guide to Orthopaedic Practices and Subspecialties
Adapted with permission from the “Resident Mentor Pamphlet,” developed by the Ruth Jackson Orthopaedic Society (RJOS).

Practice Descriptions

Solo Practice: Urban
Orthopaedic solo practice offers the opportunity to design and implement a practice specific to your individual needs and style. High levels of satisfaction can be derived from an independently managed and designed practice.

An efficient, well-managed practice can produce significant financial rewards, but you must also enjoy the challenges of monitoring and managing the business as well as the clinical aspects of the practice. When the greatest portion of your time and energy is spent dealing with managed care or coverage issues, staffing, building maintenance, and suppliers, you may become frustrated and wonder what happened to patient care.

In addition, anyone entertaining solo practice should consider their level of comfort with financial risk. The American Academy of Orthopaedic Surgeons offers practice management publications, courses, and other resources to help evaluate your risk exposure and setup your first practice. Contact (800) 626-6726 for more information.

Unless you join an Independent Physicians Association (IPA), there can be significant contracting difficulties with managed care organizations (MCOs). The IPA contracts for the group as a whole, increasing practice revenues, but lessening physician/owner control, usually one of the primary reasons for starting a solo practice.

Another disadvantage to the solo practitioner is that coverage must be arranged for vacations and emergencies. As solo practitioners become “more extinct,” these arrangements will prove more difficult. A solo practice may not be a viable option for new graduates due to the initial financial outlay and risk, as well as the changes in health care delivery systems.

Academic Practice
Academic practice contains a good balance of clinical service, intellectual activities, and the enjoyment and satisfaction found in sharing orthopaedic knowledge.

Academic medicine offers a choice between full clinical and tenure tracks. While clinical tracks vary between universities, they tend to emphasize teaching and patient care over research. The tenure track can be demanding and requires research with regular publication in peer reviewed journals. It’s important to select an orthopaedic mentor early in the process to receive advice on avoiding tenure defeating activities. Many find academic practice more interesting than private practice because their responsibilities and the university culture are more varied.

Military Practice
The military medical environment offers the opportunity to practice orthopaedics without risk of economic complications for the doctor or the patient. Patient care decisions can be made with remarkably little outside interference. Patients of all ages are represented and, while there is a large amount of trauma work, there is also a full range of orthopaedic conditions to manage.

Moving every two or three years may be a problem for some, but military practice does allow for a variety of experience in locations and practice settings that cannot be obtained in civilian life without financial risk. It’s even possible to move between clinical practice and academic research or medical management.

Solo Practice: Rural
Solo practice in a rural community is ideal for those who desire a less hectic pace and a safer environment than found in urban settings. Many rural practices are sponsored by the community hospital. Fewer practice demands usually allow more time to spend with family or to pursue other professional or personal interests.

Rural solo practice physicians rely on the community hospital to a much greater degree than in urban practices. A successful rural solo practice requires a financially stable hospital with a welcoming and community-oriented leadership.

Establishing supportive, collegial relationships can be difficult to impossible because of the small town environment. A rural practice requires high self-reliance; there may be no colleagues with whom to share problems and triumphs. As the sole orthopaedist in the area, you are “on call” all the time and must make special arrangements for vacations. As support staff are unlikely to have orthopaedic knowledge, you will be in the
enviable or unenviable position (depending on your point of view and your talents) of training staff to your methods and standards.

One issue endemic to a rural practice is deciding which cases can be safely handled in a limited environment. Interesting cases within your capabilities may need to be referred simply because the technical requirements or the potential financial drain on the community hospital cannot be justified.

**Group Practice**

A single specialty group practice was the standard orthopaedic practice not long ago. Many orthopaedists practice in single specialty group practices and have no desire to change.

The advantages and disadvantages of group practice are flip sides of the same coin depending on a physician's strengths, limitations, and interests. The autonomy found in this type of practice gives the practitioner control over equipment, environment, hours, billing, and support staff. This same autonomy requires a significant expenditure of time and energy to participate in the management of the practice.

"On-call" hours are shared, and in a congenial practice this is an advantage. In an uncongenial practice, "on-call" hours often become political coin, and scheduling or rescheduling becomes a burden. Group practice partners must be selected with care. Like family, you must establish trust, and fair and congenial relationships. Also like family, an incompatible partnership can be a daily nightmare and difficult to dissolve.

The competition and requirements of managed care and HMOs are currently placing single specialty group practices in jeopardy. Depending on how medicine and reimbursement of services evolve, the group practice may become extinct.

**Multiple Specialty with Capitated Patient Population**

In this setting, the orthopaedist works in a multi-specialty clinic with a large number of capitated patients in partnership with other specialists. The physicians share a single chart on each patient and the collegiality of a team approach to providing comprehensive health care. Colleagues from different specialties are close at hand to discuss a patient case or clinical issues.

Capitation challenges the practitioners to provide cost efficient services and work closely with discharge planners and home care departments. Opportunities exist to employ or develop leadership skills by becoming involved in clinical management committees. Practitioners working in this kind of setting can develop a sound business acumen and a knowledge of the financial realities of health care by participating in all aspects of contracting, marketing, financial planning, and practice management.

The multiple specialty clinic structure may not be a comfortable environment for all physicians. Resources, dispersed according to greatest demand, are sometimes not allocated to the special needs of an orthopaedic surgeon.

Income is by salary, rather than on a per procedure basis. This offers added security and advanced financial planning.

**Multiple Specialty with Non-Capitated Patient Population**

Orthopaedists working in a multiple specialty group without a capitation contract can expect to focus on practicing orthopaedic surgery. Ideally, this type of
practice is characterized by camaraderie, support and cooperation, open communication, and autonomy in patient care decisions. Colleagues are close at hand to discuss patient care or clinical issues. While there are no required business responsibilities, opportunities to become involved in the business aspect of the practice are available through committee participation or administration appointments.

The bureaucratic reality of multiple specialty groups is that administrative decisions are often beyond your control and made without your input. Salary structures differ between groups. Some group arrangements are competitive and based on production, while other groups prefer a set salary based on education and experience. Either arrangement can be positive or negative depending on your own drive and abilities, and those of your colleagues.

**Specialized Practices**

**Oncology**
Orthopaedic oncology includes the treatment of both benign and malignant tumors of the bone and soft tissues of the limbs, limb girdles, and sometimes the spine. The majority of orthopaedic oncologists treat both children and adults, although some limit their practice to one or the other.

Orthopaedic oncology offers the advantages of seeing a wide variety of patients who present challenging clinical problems, and operating on many different anatomic locations. The wide variety of tumors presented in this type of practice provides constant diagnostic challenges and allows for a great deal of creativity in devising treatment strategies. Multidisciplinary approaches to patient problems require close collaboration with physicians from other fields, including radiology, pathology, and medical and pediatric oncology, as well as radiation oncology.

Most orthopaedic oncology practices are university-affiliated, although a few surgeons have practices in a private setting.

**Total Joint and Adult Reconstructive Surgery**
A demographic review of U.S. and Canadian populations shows a steady and predictable increase in average age. This increase, coupled with healthier and more active senior citizens and longer life spans, has resulted in a large population of individuals who require joint reconstructive surgery.

This fascinating surgical practice includes a variety of challenging surgical procedures highlighted by the reward of seeing patients’ improved function and decreased pain. The expansion of technology has made hip, knee, shoulder, and elbow replacement commonplace. The specialty includes primary joint replacements as well as revision surgery, often with extensive use of bone grafts.

The competition between fellowship trained joint replacement surgeons and general orthopedists for primary joint replacement patients is a significant barrier in this field. Fellowship trained surgeons are more likely to receive the complex revision procedures. Technically more demanding and longer, these procedures produce less reimbursement to the surgeon per time unit and are not usually profitable for hospital centers.

**Spine**
A spinal surgery specialization allows the opportunity to cultivate definitive knowledge regarding a specific and challenging area. This rapidly changing field burgeons with new information and procedures due to prolific spinal research. The spine surgeon can train in the subspecialties of scoliosis and spinal deformity surgery. A wide variety of spine problems such as cervical or lumbar, congenital, and acquired or degenerative disorders offers unique and difficult treatment decisions, spinal instrumentation, and fusion for this patient group.

Insurance companies fail to recognize this specialization or tend to make compensation problematic. Surgery is expensive and many managed care organizations do not promote spinal surgery as a viable option. As the number of good candidates for this specialization diminish, maintaining a practice that includes general orthopaedic patients appears expedient.

**Foot and Ankle**
Significant opportunities for advancement exist in this relatively new subspecialty, yet few have entered the relatively uncrowded field of foot and ankle orthopaedic surgery. Diverse foot and ankle problems allow the specialist to focus on distinct patient populations such as sports or dance, or on specific aspects of the foot such as pediatric deformities, diabetic foot, forefront deformities, post-traumatic and reconstructive foot, degenerative and rheumatoid foot, acute trauma (Lisfranc), or calcaneal and talar fractures.

Foot and ankle orthopaedic surgeons compete with podiatrists, and referring physicians and self-referring patients often do not associate orthopaedic surgeons with the treatment of foot problems. Presenting lectures and devoting serious attention to physician networks may be necessary to develop a strong referral base.
**Sports Medicine**

Sports medicine emphasizes early diagnosis and aggressive treatment for injuries that occur in both organized and recreational athletics. Clinical skills that include highly accurate and rapid diagnostic abilities are essential to ensure treatment can be initiated as soon after the injury as possible. Advanced arthroscopic skills are necessary to restore joint normality.

Knowledge of specific rehabilitation programs and superior communication skills are critical for establishing a reputation of competence with the athlete, athlete's family, athletic trainer, coaching staff, and physical therapist.

Time demands are heavy during the fall football and soccer seasons, particularly on Friday and Saturday nights. The sports medicine physician's "trophy" is returning the athlete to the playing field. The prerequisite to all of those inviolable Friday and Saturday nights is enjoying your favorite athletic events free of charge.

**Trauma**

The orthopaedic trauma surgeon specializes primarily in acute fracture management and stabilization, and secondarily in post-traumatic reconstruction. Their scope of practice is wide and varied, covering all anatomic regions and age groups. Subspecialty areas of interest (e.g., upper extremity, pelvis and acetabulum, etc.) may be developed and pursued. A trauma surgeon inherits an unpredictable schedule, long and frequently inconvenient hours, and an often challenging work environment.

The specialty trauma practice generally requires an urban location with multi-disciplinary service support. While opportunities exist in both academic and private practice, most orthopaedic trauma surgeons practice in a group setting.

**Hand Surgery**

Formerly, a hand surgeon's practice was usually university based or university affiliated. With the increase in managed care positions available, this is no longer universally true.

The hand surgery subspecialty permits care of a variety of patients with problems affecting the hand and upper extremity. This breadth of exposure is hand surgery's greatest attraction. In any given week, the hand surgeon may treat sports injuries and congenital anomalies, perform tendon transfers for a quadriplegic, and replant multiple amputated digits.

More and more, hand surgeons trained in orthopaedics are tailoring their practices to the entire upper extremity: hand, shoulder, and elbow.

Hand surgery fellowships are the most structured of the orthopaedic fellowships and completing one is a requirement for membership to the American Society for Surgery of the Hand. In addition, a Certificate of Added Qualification (CAQ) in hand surgery is mandatory for membership—the only subspecialty with the requirement as of this writing. Despite the current trend in health care for orthopaedic surgeons to pursue a general practice, many hospitals require or prefer that hand surgery is performed by surgeons who are fellowship trained.

**Pediatrics**

As an orthopaedic subspecialty, pediatrics has the greatest diversity in the types of procedures performed and the range of diseases managed. Although the patient population is limited to children, every anatomic area is treated.

Many patients receive treatment, physical therapy, braces, and follow-up care for years, however, their changing growth, development, and personalities provide continual interest. More patients are treated in the office compared to other orthopaedic subspecialties.
A practice in pediatric orthopaedics usually follows a one (1) year fellowship. At this time, a Certificate of Added Qualification is not available. A full-time practice limited to pediatric orthopaedics usually requires an academic setting or large pediatric hospital to provide the multi-disciplinary care needed for complex cases.

General Practice Information

Locating a Practice
When looking for an orthopaedic practice, consider both practice type and practice locale. You may also want to consider: 1) your personal life and responsibilities; 2) professional training, skills, and interests; and 3) financial requirements and goals.

Practice type and location are often interconnected. Urban centers offer privacy and anonymity, and a great opportunity to subspecialize, but market competition is intense. Small city and suburban practices offer an attractive living arrangement and easier driving, but once again, the more desirable areas will have increased competition.

A rural practice is usually less busy and less competitive, but has less opportunity for high financial reimbursement or subspecializations. With the steady increase in managed care, establishing a solo practice is becoming more and more difficult.

Personal considerations should include what activities, community resources, and education are available for you and your family. Try to match your needs and interests to the location. Ultimately, the most important factor in locating a practice is where you and your family want to live.

Financial Considerations
Reimbursement and salaries vary significantly from place to place, between specialties, and even within the same specialty. The many practice variables have led to diverse and often contradictory perceptions among orthopaedists. We strongly advise residents who are considering a practice arrangement, location, or subspecialty to thoroughly explore the question of reimbursement and salary with the principals concerned in the arrangement. You may also contact your mentor, or members of the AAOS Committee on Diversity at MENTOR@aaos.org.

Certain common sense facts remain valid. Rural practices often have fewer patients than urban practices which in turn yields lower salaries. Recently, however, hospitals have begun to sponsor one or two year contracts with competitive and above average salaries to attract graduating orthopaedists. The salary may drop when the guarantee expires or the salary may increase if the practice is very busy.

Urban competition, particularly where managed care is prevalent, may lead to lower patient loads for independent practices. Military salaries tend to be competitive. Managed care salaries vary greatly by salary computation and how income earned is divided among the various specialties. Academic salaries also vary as some institutions reimburse by salary, and some based on production.

Reimbursement for subspecialty procedures does not usually reflect the difficulty or lengthiness of the procedure. Fees paid for procedures also vary across the country. The Medicare system of reimbursement has far-reaching implications for certain procedures and subspecialties. For example, total joint and adult reconstruction is most often performed on Medicare patients. Reimbursement for a revision procedure is hardly a percentage point above a primary joint replacement, even though revisions are often lengthy complex procedures that utilize many resources. Fellowship trained surgeons perform more revisions with less relative reimbursement for their effort.
Both foot and ankle, and hand procedures are paid less per operation compared with other specialties such as trauma or sports medicine. For the amount of time spent operating, arthroscopy is one of the highest reimbursed procedures.

Other factors affect reimbursement as well. Children are the most underinsured sector of our population and therefore, outside of managed care situations, reimbursement for pediatric procedures is unpredictable. Spine surgery is perceived as expensive, so managed care organizations often discourage spine surgery, decreasing the number of procedures, and thus impacting income.

Regardless of practice type, the best advice is to know how your salary is determined. Women and minority orthopaedists throughout the country can help you understand the complexities of salary computations, billing, and factors unique to the practice location you’re considering.

Contracts and Buy-Ins
Unless you are considering opening a solo practice without affiliation, retain a lawyer to review your contract. Contracts may have illegal or non-binding clauses which should be discussed prior to signing.

The preferred and most equitable buy-in arrangement offers full partnership, including ownership of the practice facility building, accounts receivable, stock, and equipment. Some arrangements offer participation in the accounts, but not the depreciable assets.

Like the major terms of a buy-in, contract terms also vary running anywhere from six (6) months to three (3) years. One (1) year is the most common. It is customary to agree on a salary for the time period preceding the buy-in.

Salaries also vary extensively depending on the area of the country and the locale of the practice (e.g., rural versus large city). It is important to understand all the terms of the buy-in before accepting a position. Never accept a position before all details are settled, and be wary of joining an orthopaedist or group who are hesitant to discuss financial details of the practice or the buy-in.

HMO and multi-specialty group contracts are not usually negotiable. There is usually no buy-in arrangement available and salary computation methods vary from group to group. Some organizations offer a salary without production considerations. Some build in increased payment for increased production. Again, know in advance the terms of the group you are joining and weigh the pros and cons regarding your own style, interests, skills, and preferences.

Most academic institutions base payment on production with a set salary to encourage teaching and research. However, some institutions pay set salaries without production incentives.

Malpractice Insurance
Two basic types of malpractice insurance are available to orthopaedists: “claims-made” and “occurrence.”

Claims-made coverage is based on incidents (or malpractice claims) that take place and are reported during the covered time period. Premiums are based on the potential for a claim against a physician. As the length of time a physician practices increases, the potential for a claim also increases, and the premiums escalate.

The advantages of claims-made coverage are that the premiums are based on actual past and current experience, and are usually less expensive. Liability limits may be changed to reflect changes in the professional liability climate.

The disadvantage of claims-made coverage is the need for “tail” coverage for malpractice suits which occurred during the time of the coverage, but were not reported until after the coverage stopped. This occurs when changing practices, changing companies, or moving to a new state. This additional coverage must be purchased from the carrier upon leaving the insurance company. Your ability to purchase such coverage should be guaranteed prior to accepting the coverage. The length of tail coverage should also be reviewed.

Each state has different statutes governing how long after an incident a suit can be filed (e.g., three (3) years in Wisconsin). A good insurance policy will offer tail coverage at no charge at a given age, for permanent and total disability, and in the event of physician demise.

Occurrence coverage insures the physician for any incident (or malpractice claim) that occurs while the policy is in effect, regardless of when the incident is reported. Premiums are based on projected possible suits. Rates may fluctuate and tend to overcompensate for our litigious society. Premiums for occurrence insurance are more expensive than for claims-made coverage. The advantage is coverage without need of tails when changing companies or practices.
Internet and Email Resources

AAHKS
American Association of Hip and Knee Surgeons
www.aahks.org

AAMC
Association of American Medical Colleges
www.aamc.org

AANA
Arthroscopy Association of North America
www.aana.org

AAOS
American Academy of Orthopaedic Surgeons
www.aaos.org

ACPOC
Association of Children's Prosthetic and Orthotic Clinics
www.acpco.org

AMA
American Medical Association
www.ama-assn.org

AMWA
American Medical Women's Association
www.amwa-doc.org

AOA
American Orthopedic Association
www.aoaassn.org

AOBAS
American Orthopaedic Foot & Ankle Society
www.aofas.org

AOSSM
American Orthopaedic Society for Sports Medicine
www.sportsmed.org

ASES
American Shoulder and Elbow Surgeons
www.aaos.org/wordhtml/ases/homeaese.htm

ASSH
American Society for Surgery of the Hand
www.hand-surg.org

AW S
Association of Women Surgeons
AWS@adminsys.com

CSRS
Cervical Spine Research Society
www.csrs.org

FOSA
Federation of Spine Associations
Unknown

HS
Hip Society
www.hipsoc.org

KS
Knee Society
www.kneesociety.org

NASS
North American Spine Society
www.spine.org

ORS
Orthopaedic Research Society
www.ors.org

OTA
Orthopaedic Trauma Association
www.ota.org

POSNA
Pediatric Orthopaedic Society of North America
www.posna.org

RJOS
Ruth Jackson Orthopaedic Society
www.rjos.org

SICOT
International Society of Orthopaedic Surgery and Traumatology
www.who.int/ina-ngo/ngo/ngo118.htm

SRS
Scoliosis Research Society
www.srs.org

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