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Introduction
This policy and procedure manual contains information you will need throughout your residency. These policies are meant to supplement, not supersede, those dictated in the University of Kansas Medical Center Graduate Medical Education Policy and Procedure Manual . . .

Mission Statement
The mission of the University of Kansas Orthopedic Surgery Residency Program is to produce outstanding surgeons who provide compassionate, effective, and appropriate treatment for their patients and who are dedicated to lifelong learning.

Professionalism

- Orthopedic Surgery Residents are to demonstrate conduct consistent with dignity and integrity of the medical profession in all contacts with patients, their families, faculty, employees, medical students and all third parties interacting with the resident, department, or the School.
- Components of professionalism, outlined by the University of Kansas School of Medicine’s Professionalism Initiative (found at http://www.kumc.edu/som/professionalism.html), include altruism, accountability, excellence, duty, honor and integrity, respect, and a commitment to lifelong learning.
- Residents will fulfill, in a timely fashion, their professional responsibilities. Failure to fulfill clinical, academic, and administrative duties, including but not limited to completion of patient charts, logging of their duty hours and operative experience, can result in remediation or disciplinary action, including suspension of any or all privileges.
- Residents will strive for personal growth and improvement and accept criticism with dignity, seek to be aware of his/her own inadequacies, be open to change, accept responsibility for his/her own errors or failures, and demonstrate the ability to work under stress.
- Residents will maintain appropriate relationships with other individuals, especially those encountered as a result of their clinical training.
- Residents will protect and respect the ethical and legal rights of patients.
- Residents personal appearance while on duty, or in areas where contact with patients or their families is possible, shall be neat, clean, professional and in accordance with general University of Kansas Hospital policies.
- Residents are expected to appear for duty appropriately rested and fit to provide the services required by the patients.
- The use of alcoholic beverages or other drugs that impair judgment while on duty is prohibited, as is reporting for duty under the influence of alcohol or other drugs that impair judgment. (See Impaired Physician and Substance Abuse Policy in the GME Policy and Procedure Manual.)
- The illegal use of drugs or abuse of pharmaceuticals is prohibited.
Orthopedic Surgery Residency Education Committee

The Orthopedic Surgery Residency Education Committee is composed of the Department Chair, Department Program Director, faculty representatives, resident representatives, and program coordinator. The members are committed to ensuring the highest quality of training in Orthopedic Surgery and are to be viewed as resources for all orthopedic residents for questions and concerns. Agenda items for the Education Committee meetings can be proposed by any faculty member or resident. These items should be forwarded to the Chair or Program Director for placement on the meeting schedule. The committee endeavors to meet at least twice each year. Concerns are also addressed in a continuous fashion at Faculty Meetings and other similar venues throughout the year.

2012-2013 Committee Members
- E. Bruce Toby, M.D., Chair
- Kim Templeton, M.D., Program Director
- Kelly Hendricks, M.D.
- Terence McIff, Ph.D.
- Stephen Munns, M.D.
- Joshua Nelson, M.D.
- John Sojka, M.D.
- Scott Mullen, M.D., Resident Member
- David Whitney, Resident Member
- Jan Brunks, C-TAGME, Residency Coordinator

Clinical Competency Committee

The Clinical Competency Committee is composed of the program director and orthopedic surgery faculty. The committee meets twice each academic year (early January and late June) to review the clinical competence of each orthopedic surgery resident through the various evaluations provided, as well as their personal knowledge of the resident, and reviews current educational tools. The Committee discusses and implements educational programs for faculty in evaluation of residents and use of the evaluation tools.

2012-2013 Committee Members
- Kim Templeton, M.D., Program Director
- Stephen Munns, M.D.
- John Sojka, M.D.
- Mike Tilley, M.D.
- Robert Worsing, M.D.
- Sean Jackson, M.D.
Selection and Appointment of Residents

The Orthopedic Surgery Residency Program uses the same criteria for the selection and appointment of residents as is outlined in the GME Policy & Procedure Manual. The program selects residents from among eligible candidates on the basis of residency related criteria such as their preparedness, ability, aptitude, academic credentials, and communication skills and personal qualities such as motivation and integrity. The program does not discriminate with regard to gender, race, age, religion, color, national origin, disability, sexual orientation, or any other applicable legally protected status. In selecting from qualified candidates, the program will participate in and abide by the rules and regulations established by the National Resident Matching Program.

The faculty of the Department of Orthopaedic Surgery at the University of Kansas Medical Center understand the need to encourage women and underrepresented minorities to pursue a career in orthopaedic surgery. Enhancing diversity deepens the richness of the training environment and improves patient care by training orthopaedic surgeons who have been exposed to a wide variety of cultural backgrounds and experiences. Members of the department are asked to speak at medical student functions within the University, at which women and URM students are particularly encouraged to explore careers in orthopaedic surgery. Faculty members also function as resources for medical students at the University of Kansas, as well as elsewhere, who are interested in careers in orthopaedic surgery. In addition, select faculty members are involved with the Ruth Jackson Orthopaedic Society, the J.R. Gladden Orthopaedic Society, and the AAOS Diversity Advisory Board.

Work Environment
The work environment within the Department is maintained to facilitate resident education, further orthopaedic research and knowledge, and provide safe and effective patient care.

The University of Kansas Medical Center will:

- provide a stipend and benefits to the resident as stipulated in the applicable Resident Agreement;
- use its best efforts, within the limits of available resources, to provide an educational training program that meets the ACGME accreditation standards;
- use its best efforts, within the limits of available resources, to provide the resident with adequate and appropriate support staff and facilities in accordance with federal, state, local, and ACGME requirements;
- orient the resident to the facilities, philosophies, rules, regulations, procedures and policies of the Medical Center, School, Department and Residency and to the ACGME’s and RRC ‘s Institutional and Program Requirements;
- Provide the resident with appropriate and adequate faculty and Medical Staff supervision and guidance for all educational and clinical activities commensurate with an individual resident’s level of advancement and responsibility;
- allow the resident to participate fully in the educational and scholarly activities of the Program and Medical Center and in any appropriate institutional medical staff activities, councils and committees, particularly those that affect Graduate Medical Education and the role of the resident staff in patient care subject to these policies and procedures;
• through the officers of the program and the attending medical staff, clearly communicate to the resident any expectations, instructions, and directions regarding patient management and the resident’s participation therein;
• maintain an environment conducive to the health and well being of the resident;
• within limits of available resources, provide:
  o adequate and appropriate food service and sleeping quarters to the resident while on-call or otherwise engaged in clinical activities requiring the resident to remain in the Medical Center overnight;
  o personal protective equipment including gloves, face/mouth/eye protection in the form of masks and eye shields, and gowns. The Occupational Safety and Health Administration (OSHA) and the Centers for Disease Control (CDC) assume that all direct contacts with a patient’s blood or other body substances are infectious. Therefore, the use of protective equipment to prevent parenteral, mucous membrane and non-intact skin exposures to a healthcare provider is recommended;
  o patient and information support services;
  o security; and
  o uniform items, limited to scrub suits and white clinical jacket;
  o through the Program Director and Program faculty, evaluate the educational and professional progress and achievement of the resident on a regular and periodic basis. The Program Director shall present to and discuss with the resident a written summary of the evaluations at least semi-annually;
  o provide a fair and consistent method for review of the resident’s concerns and/or grievances, without the fear of reprisal;
  o Provide residents with an educational and work environment in which residents may raise and resolve issues without fear of intimidation or retaliation including the following mechanisms:
    ▪ the GME office ensures that all programs provide their residents with regular, protected opportunities to communicate and exchange information on their educational and work environment, their programs, and other resident issues, with/without the involvement of faculty or attending. Such opportunities include, but are not limited to confidential discussion with the chief residents, program director, and program chair. Other intradepartmental avenues to confidentially discuss any resident concern or issue occur during the Annual Program Evaluations completed by each resident and/or through discussion with the resident representative during the required Annual Program Review (annual program Outcomes Assessment and Action Plan Reports);
    ▪ the internal review process, during which residents are afforded the opportunity to discuss their concerns about the program with a resident from another program and have them presented confidentially to the GMEC;
    ▪ an ombudsman, the Assistant Dean for GME Administration, or any other member of the GME staff, including the Executive Vice Chancellor, Senior Associate Dean and the Associate Dean, who are available for the resident to bring any issues raised in these protected resident meetings, or any other issues a resident may need to address;
    ▪ peer leadership and membership of the University of Kansas School of Medicine Resident’s Council, who are available to confidentially receive any resident concern and present their concerns to the Graduate Medical Education Committee and GME Staff;
    ▪ E*Value “On-The-Fly” praise and concern comments can be sent through E*Value directly and confidentially to the program director. “On-The-Fly”
comments can also be confidentially sent to the DIO. This can be accessed through any resident’s E*Value user menu.

- ACGME Resident Survey, administered directly to all residents in ACGME-accredited Programs. The survey provides summary and anonymous feedback to the program and GME leadership. A grievance process, as outlined in section 13 of the GME Manual, which provides the resident with a formal mechanism for addressing serious concerns within the program;
- ACGME Department of Resident Services at residenservices@acgme.org or by phone 312-755-7498 is available if the above described avenues have not satisfactorily addressed a specific resident issue. The ACGME Resident Services representative will work with the DIO to resolve issues surrounding concerns. Valid complaints are processes by Resident Services and require a response from the program director and attestation to the response by the DIO, and review by the relevant review committee.
  - upon satisfactory completion of the Program and satisfaction of the Program’s requirements and the resident’s responsibilities delineated herein, furnished to the resident a Certificate of Completion of the Program;
  - annually review and approve the number of residents and funding sources for each program and discuss these quotas and sources of funding with the chairs and Program Directors in a timely fashion so as to facilitate the recruitment and retention of residents;
  - provide the agreed upon levels of financial support, subject to the terms of the resident contract; and
  - exercise all rights and responsibilities expressed and implied by the “Institutional Requirements” of the ACGME.

Call Room
The University of Kansas Hospital has provided a call room for the orthopedic residents. It is located on the 1st floor of the hospital, one floor below the operating rooms and SICU. The room is equipped with a computer, bed, couch, TV, and small refrigerator. A bathroom is located down the hall. In addition, the residents have a room provided by the department which includes three work stations, a large sitting area with TV, a full bathroom to include a shower, and a kitchen with refrigerator and microwave. This room is in close proximity to the faculty and staff offices.

Meals
The Bell Café is located in KU Hospital and is open from 6:30 am to 8:00 pm Monday through Friday and 7:00 am to 6:30 pm weekend and holidays. They serve a full complement of hot and cold foods. Elements 4 Life is located just outside the Bell Café and is open 24 hours a day Monday through Friday, and 6:00 pm to 7:00 am on the weekend and holidays. Their menu includes soup, sandwiches, and salads. In addition vending machines are also located in the area. At Children’s Mercy Hospital the main cafeteria is opened 24 hours a day, except designated times for cleaning. Vending machines are also available. At the VA, vending machines are available during evening horse. The opportunity also exists to order food from the hospital kitchen.
**USMLE Step III**
The Graduate Medical Education office at the University of Kansas Medical Center requires all residents to provide evidence of sitting for the USMLE Step III by the beginning of their PGY-3 year. The Department of Orthopedic Surgery program strongly recommends that the residents take Step III by the end of their PGY-1 year. Residents must have successfully passed Step III and provide a copy of the USMLE transcript before receiving a certificate of completion of the program.

**Resident Case Log System**
PGY-2 through 5 residents are required to enter their operative cases and closed fracture care cases seen in the ER, outpatient clinics, and as in-patient consults in the Resident Case Log System on the ACGME website ([https://www.acgme.org/residentdatacollection/](https://www.acgme.org/residentdatacollection/)). All cases should be logged weekly and are required to be completed by the end of each rotation. Review of each resident’s operative experience will be conducted at mid-year and year-end evaluations.

**Disciplinary Action Policy**
Disciplinary actions are undertaken for residents who have been found to demonstrate unprofessional behaviors while involved in University or Hospital activities or who bring disrepute upon the Department, University, or Hospital outside of those activities. Disciplinary actions are also instituted for those who are found by the faculty to not achieving appropriate educational goals. Disciplinary actions include probation, suspension, or termination. The decision to engage in a disciplinary action is decided upon by the department faculty, unless an emergent situation arises in which the program director or department chair can institute such action independently. The resident has the right of appeal of such action to the program director and/or chair. If he/she is not satisfied with the response of the program director or chair, he/she also has the right of appeal to the Graduate Medical Education office or Executive Dean. All such actions are reportable to the GME office. Probation or suspension is initially for 3 months; they can be lifted at that time or sooner if the situation is resolved. If the situation is not resolved after 3 months, a maximum of an additional 3 month period of time can be imposed during a single academic year.

**Grievance Policy**
The rapid and confidential resolution of any and all grievances of the residents is encouraged. The formal procedure is detailed in the GME Policy & Procedure Manual and is summarized below. The resident should first discuss any grievance with the Program Director and/or Chair. This should be done without inhibition or fear of retribution. School of Medicine faculty are also identified to function as resident ombudspersons and are available to discuss and address issues with residents of all programs at any time. All matters will be handled in the most professional and expedient fashion and held in the strictest confidence. If the grievance is not resolved at the intra-departmental level, the resident has the option to present the grievance, in writing, to the Office of Graduate Medical Education to be handled by the Associate Dean for Graduate Medical Education. Any action(s) taken in good faith by the Executive Dean addressing the grievance will be final.
Remediation and Corrective Action Policy
Remediation is the process in which the faculty of a Program and a resident judged to be performing at a less than satisfactory level of work together to identify, understand, and correct the cause(s) for the residents’ deficiencies. Attempts to rectify the observed difficulties through remediation are first attempted at the Program Director level. If these efforts are unsuccessful, as deemed by the Program Director and involved faculty, then confidential discussion with the faculty regarding probation occurs. This includes review of the data, resident status determination, counseling recommendations, and faculty mentorship assignment. Placing a resident on probation is an action that may be taken by the Program if the remediation of a resident has been unsuccessful. “Probation” identifies a resident as requiring more intensive levels of supervision, counseling and/or direction than is required of other residents at the same training level in the Program. Residents may be placed on probation without initial remediation, if the concerns are of sufficient severity and after discussion with faculty. There are three types of probation defined in the GME Policy and Procedure Manual.

- Academic probation
- Clinical probation
- Administrative probation

“Correction Actions” include suspension and termination. The corrective action process can be initiated by the Program Director or Chairman. The situation is presented to the Education Committee for recommendation to begin the corrective action process. The resident involved in the corrective action process is assured the right to appeal and initiate the fair hearing process as dictated in the GME Policy and Procedure Manual.

Resident Assistance and Counseling
At some time, residents may be faced with a variety of personal problems that may affect their wellness, educational activities, and job performance. While some individuals attempt to deal with such problems on their own or with close friends, there are times when professional assistance can be helpful. The Department of Orthopedic Surgery, University of Kansas School of Medicine, and the Medical Center encourage and provide residents with easy, confidential access to on-campus and community counseling resources (GME Policy and Procedure Manual, Section 18). All teaching faculty are available to confidentially assist any resident in obtaining assistance. The resources most easily available include:

- The Department of Psychiatry resources can be reached through the Psychiatry clinic or individually through the private practices of the faculty members. Information can be obtained by calling the Department of Psychiatry at 913-588-6400.
- The Medical Advocacy Program of the Kansas Medical Society is available to confidentially rehabilitate and support licensed Kansas State physicians (1-800-332-0156 or 1-785-235-2383). Informational brochures about this program can be obtained from the Student Center or the Office of the Dean of the School of Medicine. Information and referral is also available from Risk Management in the Office of Legal Counsel.
University Counseling Center located in the Student Center G116. Contact number is 913-588-6580. Resident will find help with the following:

- Study skills
- In-training exam preparation
- USMLE Step 3 preparation
- Specialty Board Exam assistance
- Educational and performance excellence coaching
- Manage stress/time
  - Residency demands
  - Personal life demands
- Relationships, marital, or family concerns
- Personal counseling
- Psychiatric counseling
- Consultation and referrals
- Crisis intervention

State of Kansas HealthQuest 24-hour, toll-free assistance line (1-800-284-7575).

Vacation
The University will provide up to a maximum of three weeks (15 workdays) of vacation, per year, which is covered by the resident stipend. Vacation cannot be accumulated from year to year. Vacations must be requested from and approved by the physicians on the service at the time of the vacation and for junior residents by the senior resident on the service. Vacations are not to be scheduled during the months of June and July without the explicit approval by the Residency Program Director and/or Department Chairman.

PGY-1 Orthopedic Residents are to take two weeks of vacation during two different orthopedic surgery rotations and the other week during a general surgery rotation.

Sick Leave
The University will provide up to 10 workdays of sick leave per year to cover personal illness or illness in the resident’s immediate family (spouse or children). Sick leave cannot be accumulated from year to year. Use of sick leave must be approved by the Program Director or Department Chair. At the discretion of the Chair or Program Director, a physician’s statement may be required as a condition of approval for sick leave.

Professional Leave
The University of Kansas will provide all residents with paid professional leave at the discretion of the Program Director for the following reasons:

1. Scholarly presentations at regional and national conferences.
2. Conference attendance in a community away from the University of Kansas Medical Center
   - PGY-1: AO North America Principles & Techniques of Operative Fracture Management Course
   - PGY-2: Orthopaedic Trauma Association Comprehensive Fracture Course for Residents
   - PGY-3: Arthroscopy Association of North American Residency Course
• PGY-4: Sub-specialty course
• PGY-5: American Academy of Orthopaedic Surgeons Annual Meeting and Miller Review Course or other approved review course
3. Taking medical board examinations
4. Up to seven work days for fellowship interviews during PGY-4 year.

Additional Types of Leave

American Board of Orthopaedic Surgery (https://www.abos.org)
The American Board of Orthopaedic Surgery requires that each five years of credit for residency must include at least 46 weeks of full-time orthopaedic education. Vacation or leave time may not be accumulated to reduce the five year requirement. Therefore in order for a resident to be able to sit for Part I of the Boards in July following their graduation, a resident may not be on any kind of leave from the program for more than six weeks in an academic year.

Request for Leave Form
A leave request form (to be used for any type of leave, i.e. vacation, sick, or professional leave) must be completed, signed by the resident and staff physician(s), and submitted to the program coordinator at least two weeks in advance (see page 14). Denial of a specific request for vacation is a management decision on the part of the program and is not a grievable matter. Failure to complete a leave request form prior to taking leave may result in disciplinary action.
DEPARTMENT OF ORTHOPEDIC SURGERY

LEAVE REQUEST FORM

Name: ____________________________________________

Dates: ____________________________________________

Return to Work Date: ________________________________

____ Vacation      ____ Professional Leave      ____ Sick      ____ Other: _______________________

If Professional Leave –

Name of Meeting: __________________________________

Presentation (if any): ______________________________

________________________________________________________________________

________________________________________________________________________

______________________________    ______________________________
(Attending Physician Signature)    (Program Director/Coordinator Signature)

______________________________
(Attending Physician Signature)

______________________________
(Attending Physician Signature)

Resident Leave Request Form
05/10
Conferences and Curriculum

<table>
<thead>
<tr>
<th>Day/Time</th>
<th>Name</th>
<th>Attendees</th>
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<tbody>
<tr>
<td>Tuesdays, 7:00–8:00 am</td>
<td>Indications &amp; Imaging Study Conf</td>
<td>Residents &amp; Faculty</td>
</tr>
<tr>
<td>Wednesdays, 6:30 – 9:30 am</td>
<td>Core Conference</td>
<td>Residents &amp; Assigned Faculty</td>
</tr>
<tr>
<td>Wednesdays (monthly), 6:30 – 7:00 am</td>
<td>M&amp;M Conference</td>
<td>Residents &amp; Faculty</td>
</tr>
<tr>
<td>Wednesdays (bi-monthly) 6:30 – 8:00 am</td>
<td>JBJS Journal Club</td>
<td>Residents &amp; Faculty</td>
</tr>
<tr>
<td>Wednesdays (bi-monthly) 6:30 – 7:30 am</td>
<td>Specialty Journal Club</td>
<td>Residents &amp; Faculty</td>
</tr>
<tr>
<td>Wednesdays (bi-monthly), 3:00–6:00 pm</td>
<td>Arthroscopy Lab</td>
<td>Sports Medicine Service</td>
</tr>
<tr>
<td>Thursdays, 7:00–8:00 am</td>
<td>Spine Conference</td>
<td>Spine Service</td>
</tr>
<tr>
<td>Thursdays, 7:00–8:00 am</td>
<td>Trauma Conference</td>
<td>Trauma Service</td>
</tr>
<tr>
<td>Thursday (monthly), 8:00–9:00 am</td>
<td>Research Conference</td>
<td>Research Committee &amp; Residents</td>
</tr>
<tr>
<td>Friday (monthly), 7:15–8:00 am</td>
<td>Sports Medicine Journal Club</td>
<td>Sports Medicine Service</td>
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In addition to the conferences listed above, residents and faculty are also required to attend specialty meetings throughout the year, to include the Peltier Lecture, Kansas City Orthopaedic Society Meeting, and Kansas Orthopaedic Society Annual Meeting.

The curriculum for the Orthopedic Surgery Residency program is a two year rotating curriculum and is based on the AAOS Comprehensive Orthopaedic Review book. Therefore each topic is covered at least twice for each resident. The curriculum also includes anatomy and dissection during the summer months and OITE reviews in the fall. Readings are also assigned most weeks for review and are chosen from the Journal of the American Academy of Orthopaedic Surgeons.

Rotations
PGY-1 residents rotate for three months on orthopedic surgery, and one month each on vascular, general surgery trauma, general surgery ICU, plastic surgery, general surgery night float, general surgery acute care, neurosurgery, musculoskeletal radiology, and rehabilitation medicine.

PGY-2 residents spend three months each at the VA, Children’s Mercy Hospital, and on the sports medicine and trauma services at University of Kansas Hospital

PGY-3 residents return to Children’s Mercy Hospital for three months. They complete their research rotation this year and spend three months each on the trauma and musculoskeletal oncology services.

PGY-4 residents rotate back at the VA for three months and are on the spine service for three months. They split three months each between foot & ankle and trauma, and sports medicine and hand & upper extremity.

PGY-5 residents return to the VA for three months, spend three months on the adult reconstruction service at KU Hospital and again split three months each between foot & ankle and trauma, and sports medicine and hand & upper extremity.
Research
The research rotation is a three-month block during the PGY-3 year. However, the research experience is ongoing, spanning several years, beginning with planning and preparation prior to the research rotation. Residents are expected to complete this initial planning by the end of their PGY-2 year. The project is expected to be completed and an initial draft of a research article written by the end of the rotation. Research can consist of clinical or laboratory investigations, with research involving both elements preferred.

The residents will attend monthly Research Committee Meetings to update the committee on their progress the month before and during their research rotation. Members of the committee are:

- Douglas Burton, M.D., Chair
- Terence McIff, Ph.D.
- Jinxi Wang, M.D., Ph.D.
- Marc Asher, M.D.
- Archie Heddings, M.D.
- Sharon Bradshaw, Clinical Research Coordinator
- Stephanie Robinson, Clinical Research Coordinator

Residents are encouraged to present their research at local and regional meetings and, in addition, will be allowed to present their research project (podium or poster) at one national meeting within the 48 continuous states. In addition each resident will present their research at the Peltier Research Program during their PGY-5 year.

Caregiver Rolls
In the clinical learning environment, each patient will have an identifiable, appropriately-credentialed and privileged attending physician or licensed independent practitioner, who is ultimately responsible for that patient’s care. A licensed independent practitioner may include non-physician faculty working in conjunction with the orthopedic surgery department. This information will be available to residents, faculty members, and patients. Residents and faculty members will inform patients of their respective roles in each patient’s care. For in-patients, this is available within the 02 patient care team and provided on the patient information sheet included in the admission packet and listed on the “white board” in each patient’s room. In addition, residents are to introduce themselves and give the name of their supervising faculty, as well as present to each patient seen in consult or as an inpatient, a business card identifying themselves as an orthopedic surgery resident. In the outpatient setting, each patient and their family is given a paper describing the definition of “faculty”, “attending”, “resident”, “fellow”, and “medical student”. Both residents and faculty will introduce themselves and their role, as well as give each patient a business card.
Optimal Clinical Workload

The clinical responsibilities for each resident will be based on PGY-level and level of competence, patient safety, resident education, severity and complexity of patient illness/condition and available support services.

Supervision of Residents

Orthopaedic surgery residents are students, learning and participating in the real world of practicing orthopaedic surgeons. Their participation in patient care is supervised by faculty and more senior residents, to assure that they are acquiring orthopaedic knowledge and developing appropriate examination and surgical skills to ensure the highest quality, safety, and effectiveness of patient care. The level of supervision in the out-patient, in-patient, and operating room settings will be appropriate for the individual residents’ demonstrated level of knowledge, competence, and experience. Faculty and more senior residents are available in all settings at all times to discuss cases and enhance resident education. Residents are strongly encouraged to seek assistance and guidance when encountering patients with unfamiliar or complex musculoskeletal conditions; this ensures safe patient care while also serving as educational opportunities for the residents. Residents are also encouraged to reach out to either the Program Director or Program Chair if they are placed in an environment in which they do not feel competent.

Methods of Supervision

- Some activities will require the physical presence of the supervising faculty member.
- For many aspects of patient care, the supervising physician will be a more advanced resident.
- All care provided by the resident will be adequately supervised by the by the involved faculty member or resident physician in his/her “final years of training”, either immediately available or by means of telephonic and/or electronic modalities.
- For those conditions for which intermediate level and senior level residents have been deemed competent to provide care without immediate supervision, post hoc review of this care with feedback as appropriate will occur.
- The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident will be assigned by the program director and faculty members.
- The program director will evaluate each resident’s abilities based on the following specific criteria and when available will be guided by specific national standards-based criteria.
- Faculty members functioning as supervising physicians will delegate portions of care to residents, based on the needs of the patient and the skills and competence of the resident.
- “Residents in their final years of training” will serve in a supervisory role of PGY 1 and “intermediate residents” in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident.
Levels of Supervision

**Direct Supervision (DS)** – The supervising physician is physically present with the resident and patient.

**Indirect Supervision with Direct Supervision Immediately Available (IS-A)** – The supervising physician is physically within the hospital or other site of patient care and is immediately available to provide Direct Supervision.

**Indirect Supervision with Direct Supervision Available IS-B)** – The supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision.

**Oversight (O)** – The supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

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<thead>
<tr>
<th>LEVEL of SUPERVISION</th>
<th>ACTIVITIES /PROCEDURES (as defined by RRC &amp; Program)</th>
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<tbody>
<tr>
<td>DIRECT</td>
<td>Splinting/casting&lt;br&gt;Large joint aspiration/injection&lt;br&gt;Small joint aspiration/injection&lt;br&gt;Spine examination&lt;br&gt;Diagnosis and appropriate initial management of:&lt;br&gt;  - joint dislocation&lt;br&gt;  - open fracture&lt;br&gt;  - open joint&lt;br&gt;  - compartment syndrome&lt;br&gt;  - cauda equine syndrome&lt;br&gt;  - peripheral nerve injury&lt;br&gt;  - septic joint</td>
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<tr>
<td>INDIRECT A (with direct supervision immediately available)</td>
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<tr>
<td>INDIRECT B (with direct supervision available-as determined by program specific RRC guidelines PR VI.D.5.a).(1))</td>
<td>N/A</td>
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<td>LEVEL of SUPERVISION</td>
<td>ACTIVITIES /PROCEDURES (as defined by RRC &amp; Program)</td>
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<td>DIRECT</td>
<td>Adjustment of external fixators</td>
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<td>Placement of external fixators</td>
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<td>Rotator cuff repair</td>
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<td>Total hip arthroplasty</td>
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<td>Total knee arthroplasty</td>
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<td>INDIRECT A (with direct supervision immediately available)</td>
<td>Arthroscopic debridement (e.g. partial menisectomy)</td>
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<td>Finger amputations</td>
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<td>Hematoma blocks</td>
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<td>Removal of hardware</td>
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<td>Toe amputations</td>
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<td>INDIRECT B (with direct supervision available)</td>
<td>Closed reduction of dislocations</td>
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<td>Closed reduction of fractures</td>
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<td>Closure of simple lacerations</td>
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<td>Joint aspirations</td>
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<td>Measurement of compartment pressure</td>
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<td>Repair of nail bed injuries</td>
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<td>Simple tendon repairs</td>
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<td>OVERSIGHT (with direct supervision available)</td>
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<td>Closure of simple lacerations (PGY-3)</td>
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<td>Repair of nail bed injuries (PGY-3)</td>
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<td>Splinting/casting of extremities</td>
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## RESIDENTS IN FINAL YEARS OF TRAINING

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<tr>
<th>LEVEL of SUPERVISION</th>
<th>ACTIVITIES /PROCEDURES (as defined by RRC &amp; Program)</th>
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<td><strong>DIRECT</strong></td>
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<td>Spine decompression</td>
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<td><strong>INDIRECT A (with direct supervision immediately available)</strong></td>
<td>Adjustment of external fixators</td>
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<td>ACL reconstruction</td>
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<td><strong>INDIRECT B (with direct supervision available)</strong></td>
<td>ACL reconstruction (PGY-5)</td>
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<td>Arthroscopic debridement (e.g. partial menisectomy)</td>
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<td>Carpal tunnel release (PGY-5)</td>
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<td>Removal of hardware</td>
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<td>Splinting/casting of extremities</td>
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### PGY-1 Objectives/Competencies

Name: ____________________________________________

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<td>Splinting/casting</td>
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<td>Spine examination</td>
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<th>Diagnosis and appropriate initial management of:</th>
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<td>Joint dislocation</td>
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<td>Open Fracture</td>
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<td>Peripheral nerve injury</td>
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<td>Septic joint</td>
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Policy of Contacting Supervising Faculty
The Orthopedic Surgery Residents are to contact the supervising faculty directly when the following occurs:

- Deterioration of patient’s condition
- Consultation with intensive care team (surgical or medical)
- Transfer to intensive care unit
- Concern regarding compartment syndrome
- Concerns regarding excessive post-operative bleeding
- Change in neurologic or peripheral vascular status
- Patient fall with injuries
- Need for surgical intervention
- Death

Hand-off Policy
The Department of Orthopaedic Surgery at the University of Kansas Medical Center realize the importance of quality provider-to-provider communication to better care for our patients. In order to fulfill this obligation we have developed in O2 (our electronic medical record) a patient list which can be shared from any computer in the medical center complex, as well as at home (see next page for sample form), and follow the hand-off principles below as outlined by the “SIGNOUT” template developed by the GMEC:

- Residents leaving for the day will have one-to-one verbal communication with on-call resident
- Conversation will include the following:
  - Patient identifying information: name, age, gender, diagnosis, operative procedures, staff surgeon (“ortho-rounding”)
  - Hospital course (i.e.---> reason for admission)
  - Daily update and current status (i.e.---> progression with physical therapy, current anticoagulation/antibiotics)
  - Upcoming events → possible overnight events, consultants’ plan
  - Care plan → tasks needing to be completed overnight, future plan of care (i.e.---> OR days, procedures, etc), whom to contact in case of further questions/concerns (“ortho handoff”)
  - Time for questions
<table>
<thead>
<tr>
<th>Room/Bed</th>
<th>Patient Name/Age/Sex</th>
<th>MRN</th>
<th>Ortho Rounding</th>
<th>Ortho Handoff</th>
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Evaluation and Promotion of Residents

The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident will be assigned by the program director and faculty members. The program director will evaluate each resident’s abilities based on specific criteria. The evaluation will be guided by specific national standards-based criteria, where available. Faculty members functioning as supervising physicians will delegate portions of care to residents, based on the needs of the patient and the skills of the residents but will maintain responsibility for the care of that patient and supervision of the resident. Senior residents or fellows will serve in a supervisory role of junior resident in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident.

Per ACGME requirements, the orthopedic residents receive 360-degree evaluations. Teaching faculty and outpatient clinic nurses evaluate the residents at the end of each rotation. Inpatient ward nurses, case managers, OR nurses, and patients evaluate residents throughout the year. Residents are evaluated on the five competencies: patient care, medical knowledge, practice based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. Residents are also evaluated confidentially and anonymously by their peers bi-annually each academic year. All evaluations are discussed with the resident during the mid-year and year-end meetings with the program director. In addition, the residents evaluate the teaching faculty at the end of each rotation and the faculty and residents evaluate the program at the end of the academic year. Evaluations of the faculty and program are confidential and anonymous. (Examples of evaluations begin on page 131.)

After satisfactory completion of each year of Graduate Medical Education experience, residents in good standing will be promoted to the next year of the program subject to the terms, limitations, and conditions described in the GME Policy & Procedures Manual and the Resident Agreement.

Upon successful completion of the Orthopedic Residency Program and USMLE Step III exam, graduates will receive a certificate signifying completion of the residency program.

Duty Hours

The Orthopedic Surgery Residency Program at the University of Kansas Medical Center abides by the ACGME Duty Hour Regulations. Duty hours are defined as all clinical and academic activities related to the program; i.e. patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities, such as conferences. Duty hours do not include home call or reading and preparation time spent away from the duty site.

- Duty hours are limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.
- Residents will be off one day (24 consecutive hours) in seven, free from all educational and clinical responsibilities, averaged over a four-week period, inclusive of call.
- Duty periods of PGY-1 resident will not exceed 14 hours in duration.
- Duty hours of PGY-2 residents and above will be scheduled to not exceed 24 hours of continuous duty in the hospital. Residents are encouraged to use alertness
management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 pm and 8:00 am is strongly suggested.

- For the purpose of patient safety and resident education, residents will be allowed to remain on-site for the effective transfer of patient care. However, this period of time must be no longer than an additional four hours.
- Residents will not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.
- In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care of a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, educational importance of the events transpiring, or humanistic attention to the needs of a patient or family. Under those circumstances, the resident must:
  - appropriately hand over the care of all other patients to the team responsible for their continuing care; and,
  - document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director, who will review each submission of additional service and track both individual resident and program-wide episodes of additional duty.
- PGY-1 resident will have at least 10 hours free of duty between scheduled duty periods.
- Intermediate-level residents (PGY-2 and -3) will have at least eight hours (preferably 10 hours) between scheduled duty periods. They will have at least 14 hours free of duty after 24 hours of in-house duty.
- Residents in the final years of education (PGY-4 and -5) must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods. This preparation will occur within the context of the 80-hour maximum duty period length and one-day-off-in-seven standards. While it is desirable that the resident have eight hours free of duty between scheduled duty periods, there may be circumstances when these residents must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty. These circumstances will be monitored by the program director.
- Time spent in the hospital by residents on at-home call will be counted toward the 80-hour maximum weekly hour limit. At home call will not be so frequent or taxing as to preclude rest or reasonable personal time for each resident. Residents are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new “off duty period.”
- Residents on call are to assist covering the OR during evening hours so that the other residents leave by 8:00 pm for ten hours off between shifts.
Residents are required to log duty hours each day on *E-Value. A Duty Hour Violation report will be run each Wednesday morning for the preceding week. The reports are reviewed to assess compliance with the 10 hour break rule. Residents who are not in compliance with the duty hours will be notified by e-mail. If the duty hours were put into the system incorrectly, they will be corrected by the resident. If the duty hours are in violation, the resident will respond to the e-mail indicating the reason for the violation.

Residents who are more than one week late in logging their duty hours in *E-Value, three times in an academic year will be prohibited from attending their educational conference during that year. Failure to continue to log Duty Hours will be grounds for disciplinary action.

Instructions for Logging Duty Hours on *E-Value

1. Go to https://www.e-value.net/
2. Log on using KUMC login, password and institution code (kumc)
3. Click on the Duty Hours box on the left hand side
4. Click on the day of the month
5. Enter time in and time out
6. Enter select task for this period of time tracking
   a. Work hours planned
   b. Called in on home call
   c. Paid Holiday
   d. Vacation (12:00 am – 11:45 pm; Monday - Friday)
   e. Sick
   f. Professional leave
   g. Etc
7. Choose applicable activity
   a. Click on box with two green arrows for full listing
   b. If on vacation, holiday, sick, etc (any time away from service) and rotating at KUMC or CMH, click Paid Leave Kansas University Hospital

Fatigue and Sleep Deprivation
Lectures are included, through both the GME core series and the orthopaedic surgery department, to discuss signs of fatigue and sleep deprivation. Residents are monitored for fatigue by faculty and more senior level residents. Residents demonstrating signs of fatigue are strongly encouraged to discontinue patient care activities until they have had sufficient rest. The faculty acknowledge, however, that fatigue at some level is part of real world surgical practice, and that learning to identify and accommodate to that fatigue is best done under the supervised conditions of a residency program.

Fatigue Transportation
Transportation will be provided to residents who are too fatigued to drive home. Two taxi service vouchers are available on the bulletin board in the residents’ room. The taxi service will provide
transportation home and return to the hospital the following day. Any resident using this service is to meet with the program director the next day to discuss the nature of the fatigue, as well as future mitigation strategies. The instance is to be documented within E*Value in the Fatigue Mitigation File.

**Moonlighting**
Moonlighting in any form is prohibited in the Orthopedic Surgery Residency program at the University of Kansas Medical Center.

**Goals & Objectives**
Goals and Objectives for the Orthopedic Surgery Residency Program, as well as for each rotation, are below. This document describes the educational and responsibility expectations for each clinical rotation of the Orthopedic Surgery Residency Program. They also outline the goals and objectives for the six ACGME competencies. The goals and objectives for each rotation is sent electronically through E*Value to each resident a week before the start of a new rotation.

Appropriate progress toward program training completion for each resident is determined at least annually by the Program Director, Chairman, and the Resident Education Committee. The resident’s progress is determined by accomplishment of the applicable program, rotation, and core competency goals and objectives. Appropriate resident progress also requires satisfactory resident evaluations and operative training experience, as well as active successful participation in all required components of the Orthopedic Surgery educational program and compliance with all department, institutional, and ACGME policies. Final program completion also requires demonstrated competency in all six clinical core competencies as stipulated by the Department of Orthopedic Surgery Core Competency Goals and Objectives. In addition, the residents are encouraged to utilize the core competencies as a basis for self-reflection and self-assessment of their progress through the training program.
Goals: Graduates of the KU Orthopaedic Surgery Residency program will be competent to practice independently, providing both non-operative and operative care of patients with diverse musculoskeletal conditions. They will provide compassionate care, sensitive to the needs of diverse populations, in the context of a variety of health care settings. They will understand the impact of musculoskeletal conditions and their treatment on patients, families, and society at large.

Objectives:

1. Demonstrate culturally competent communication skills with patients, families, and other health care providers (CIPS)
2. Demonstrate effective communication skills with other health care providers and ancillary personnel (CIP
3. Be able to perform a comprehensive physical examination of the spine, pelvis, and extremities
4. Be able to perform a complete neurologic examination
5. Demonstrate knowledge of which radiologic studies to order for specific conditions
6. Demonstrate the ability to interpret common radiographic studies (e.g., plain radiographs, computed tomography, MRI, arthrograms)
7. Demonstrate ability to recognize orthopaedic emergencies and initiate management thereof
8. Demonstrate the ability to formulate a non-operative or operative treatment plan, after evaluation of a patient and relevant diagnostic studies
9. Be able to recognize patients with conditions that need referral to health care providers with more specialized training
10. Demonstrate technical proficiency in common orthopaedic surgical procedures
11. Demonstrate the ability to anticipate, recognize, and initiate management of common surgical complications
12. Demonstrate the ability to interact with a variety of health care systems and to advocate for patients within these systems
13. Demonstrate professional conduct
14. Initiate and continue life-long learning habits
15. Be able to review treatment-related complications, search relevant literature, describe evidenced base medical practice as it exists and recommend any needed changes in practice
16. Demonstrate the ability to educate patients, families, and other health care providers about common musculoskeletal conditions, their evaluation, and recommended treatment
INTERN EDUCATIONAL GOALS & OBJECTIVES

It is understood that there is substantial overlap in terms of knowledge and skills that will be acquired on the various rotations

PGY-1

**Overall Goal**
The overall goal of the first year of training is to introduce the orthopaedic surgery resident to the basic principles involved in the management of musculoskeletal and surgical problems through a broad exposure to a variety of surgical disciplines. This includes experience in patient management in the inpatient and outpatient settings and the teaching of basic surgical principles in the Operating Room.

**Overall Objective**
The overall objective of the first year of training is for the orthopaedic surgery resident to evaluate and provide perioperative care for surgical patients with a wide spectrum of pathology, understand the breadth and multidisciplinary nature of musculoskeletal evaluation and treatment, learn to evaluate patients with musculoskeletal conditions, and to acquire basic technical surgical skills.
General Surgery/Emergency Surgery Rotation

The rotation is one month in length. The focus for orthopaedic residents is participation in the care of patients in the emergency department and in-patient areas. The residents are under the close supervision of general surgery faculty. There is one orthopaedic resident on the service at a time; the remainder of the service is comprised of general surgery residents. Didactic sessions are arranged by the Department of General Surgery.

Core Competency: Patient Care

Goals:
- Know basic principles of trauma patient management including specific requirements for injuries to each anatomic location.
- Know basic surgical techniques, including wound closure and debridement of open wounds.
- Know how to evaluate and describe the differential diagnosis of patients with acute abdominal pathology and extremity injury.

PGY1 will demonstrate beginning competency in the following objectives

Objectives:
- Utilizes drugs used commonly in surgical practice including analgesics, local anesthetics, antibiotics, anti-inflammatory agents, and amnestic.
- Participates in a cardiopulmonary resuscitation.
- Close traumatic wounds in a satisfactory fashion using appropriate surgical technique.
- Appropriately use sterile technique and infection control practices.
- Provide prophylaxis against infection.
- Identify patients with compromised immune systems due to medications or underlying diseases.
- Identify commonly acquired soft tissue infections.
- Detect severe and/or deep infections using physical examination and radiographic modalities and understand the urgency required in treating specific problems.
- Use history and physical exam as well as scoring systems to evaluate trauma severity.
- Evaluate and perform initial management of patients with blunt or penetrating trauma to the head and neck, chest, abdomen, and extremities.
- Identify indications for emergency surgical intervention after trauma, as well as indications for additional radiographic evaluation.
- Evaluate a patient with acute abdominal pain using history and physical examination, routine lab tests, and imaging techniques when appropriate.
- Recognize obstructive or inflammatory abdominal conditions in the adult
- Perform gastrointestinal decompression and determine the need for surgical intervention in patients with abdominal pathology.
- Assess factors that can affect wound healing
- Evaluate and provide initial management for the patient with gastrointestinal bleeding.
- Identify and describe appropriate evaluation and management of compartment syndrome.
**Core Competency Medical Knowledge**

**Goals:**
- Know basic principles of wound healing
- Know basic principles involved in the radiographic evaluation of acute surgical problems.
- Know how to treat common acute surgical pathology.
- Know parameters used for triaging patients presenting with acute surgical pathology.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Identify factors that can impair wound healing.
- Describe wound management techniques for incisional wounds, partial thickness injuries, and full thickness wounds.
- Describe the evaluation and treatment of patients with acute surgical problems.

**Measurement:** Faculty rotation evaluation

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**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Demonstrate critical evaluation skills concerning the effectiveness of the management of the acute surgical patient

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective:**
- Critically evaluate the effectiveness of management of the acute surgical patient

**Measurement:** Faculty rotation evaluation
Core Competency Interpersonal and Communication Skills

Goals:
- Know how to interact in an effective manner with all personnel in the ED and ICU environment involved in the care of surgical patients.
- Demonstrate effective, culturally competent communication skills when dealing with acute surgical patients and their families.

PGY1 will demonstrate beginning competency in the following objectives

Objectives:
- Demonstrate ability to interact in an effective manner with all personnel in the ED and SICU environments.
- Demonstrate effective, appropriate, and culturally competent communication skills.

Measurement: Faculty rotation evaluation

Core Competency Professionalism

Goal:
- Know how to act in a professional and ethical fashion in the ER setting.

PGY1 will demonstrate beginning competency in the following objectives

Objective:
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning.

Measurement: Faculty rotation evaluation

Core Competency Systems-based Practice

Goal:
- Know how to utilize available resources to maximize the care of surgical patients.

PGY1 will demonstrate beginning competency in the following objectives

Objective:
- Demonstrate the ability to utilize available resources to maximize the care of the acute surgical patient.

Measurement: Faculty rotation evaluation
General Surgery/Night Float Rotation

The rotation is two months in length. Residents primarily participate in in-patient care. The residents are under the close supervision of general surgery faculty. There is one orthopaedic surgery resident on the rotation at a time; the remainder of the rotation is comprised of general surgery residents. Didactic sessions are arranged by the Department of General Surgery.

### Core Competency: Patient Care

**Goals:**
- Know the assessment and management of the endocrine system.
- Know assessment and management of the hepatobiliary system.
- Know assessment and management of the genitourinary system.
- Know assessment and management of the female reproductive system.
- Know basic surgical techniques

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Perform a nutritional assessment, describe indications for clinical support, and provide nutritional support using both the venous or enteral routes
- Modify nutritional support for patients with significant concurrent problems including renal disease, liver disease, cardiac disease, and diabetes.
- Manage complications of nutritional support such as metabolic abnormalities, pneumothorax, venous thrombosis or embolic phenomena.
- Adjust drug dosages related to specific metabolic abnormalities.
- Participate in a cardiopulmonary resuscitation.
- Recognize postoperative wound healing problems such as wound infection, hematoma, and fascial dehiscence
- Identify patients with compromised immune systems due to medications or underlying diseases.
- Identify when to pan-culture patients with suspected infections.
- Treat commonly acquired infections in the postoperative setting.
- Detect severe and/or deep infections using physical examination and radiographic modalities and understand the urgency required in treating specific infections.
- Estimate extracellular fluid volume, intravascular volume, and total body water in surgical patients.
- Determine common sources of loss for fluid and electrolytes and replace fluids and electrolytes appropriately.
- Treat common metabolic disturbances and identify their causes.
- Assess coagulation abnormalities both through history and physical examination and laboratory tests.
- Use blood transfusions appropriately and recognize transfusion reactions and complications of massive transfusions.
• Appropriately use and monitor anticoagulation therapy.
• Differentiate various etiologies for shock and treat them appropriately.
• Identify indications for invasive hemodynamic monitoring.
• Identify the indications for intubation and mechanical ventilation.
• Manage a ventilator and wean a patient off a ventilator.
• Evaluate a patient with acute abdominal pain using history and physical examination, routine lab tests, and imaging techniques when appropriate.
• Recognize obstructive or inflammatory abdominal conditions in the adult, perform gastrointestinal decompression, and determine the need for surgical intervention.
• Evaluate the major functions of the liver using history and physical examination and appropriate laboratory and radiologic tests.
• Evaluate patients with upper abdominal pain and differentiate hepatitis and pancreatitis from gall bladder pathology.
• Manage patients after stomach, gastrointestinal, hepatic, splenic, pancreatic and biliary tree surgery.
• Evaluate and manage patients with gastrointestinal bleeding.
• Evaluate and provide initial treatment for patients with urinary retention, urolithiasis, urinary tract infections, and sexually transmitted diseases.
• Demonstrate basic surgical techniques.

**Measurement:** Faculty rotation evaluation

### Core Competency Medical Knowledge

**Goals:**

- Know the basic anatomy and physiology of the endocrine system as well as its pathophysiology.
- Know the basic anatomy and physiology of the hepatobiliary system as well as its pathophysiology.
- Know the basic anatomy and physiology of the genitourinary system as well as its pathophysiology.
- Know the basic anatomy and physiology of the female reproductive system as well as its pathophysiology.
- Understand basic principles involved in nutrition.
- Know the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in surgical practice
- Understand basic principles of biostatistics and outcomes assessment.

*PGY1 will demonstrate beginning competency in the following objectives*
### Objectives:
- Demonstrate knowledge of the endocrine, heptobiliary, genitourinary, and female reproductive systems.
- Describe the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in surgical practice including cardiac medications, analgesics, local anesthetics, antibiotics, anticoagulants, ant-inflammatory agents, diuretics, chemotherapy agents, psychotropic medications, respiratory drugs, laxatives and amnestics.

**Measurement:** Faculty rotation evaluation

### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Knows how to critically evaluate the effectiveness of the peri-operative management of general surgery patients.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective:**
- Critically evaluate the effectiveness of the peri-operative management of general surgery patients.

**Measurement:** Faculty rotation evaluation

### Core Competency Interpersonal and Communication Skills

**Goal:**
- Knows how to interact in an effective manner with all personnel in hospital environment involved in the peri-operative care of general surgery patients.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in hospital environment involved in the peri-operative care of surgical general surgery patients.
- Demonstrate appropriate and effective communication skills with surgical patients and their families.

**Measurement:** Faculty rotation evaluation
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<thead>
<tr>
<th>Core Competency Professionalism</th>
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<td><strong>Goal:</strong></td>
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<td>- Know how to act in a professional and ethical fashion.</td>
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*PGY1 will demonstrate beginning competency in the following objectives*

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<th>Objective:</th>
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<tr>
<td>- Demonstrate professional behavior and attitudes.</td>
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**Measurement:** Faculty rotation evaluation

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<tr>
<th>Core Competency Systems-based Practice</th>
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<tr>
<td><strong>Goal:</strong></td>
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<tr>
<td>- Know how to utilize available resources to address specific patient needs during the peri-operative period</td>
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*PGY1 will demonstrate beginning competency in the following objectives*

<table>
<thead>
<tr>
<th>Objectives:</th>
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<tbody>
<tr>
<td>- Utilize available resources to maximize the care of general surgery patients.</td>
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<tr>
<td>- Ability to work effectively within an interprofessional team.</td>
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<tr>
<td>- Ability to recognize system error and advocate for system improvement.</td>
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<tr>
<td>- Identify forces that impact the cost of health care and advocate for cost-effective care.</td>
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<tr>
<td>- Knowledge of evidence-based, cost-conscious strategies to optimize care delivery</td>
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</table>

**Measurement:** Faculty rotation evaluation
General Surgery/Trauma

The rotation is one month in length. Residents are expected to participate in the care of patients in the emergency department and in-patient areas, including the intensive care unit. The residents are under the close supervision of general surgery faculty. There is one orthopaedic resident on the service at a time; the remainder of the service is comprised of general surgery residents. Didactic sessions are arranged by the Department of General Surgery.

**Core Competency: Patient Care**

**Goals:**
- Know basic principles of trauma patient management.
- Know how to manage common as well as more complex clinical problems pharmacologically.
- Know how to manage surgical infection as it relates to trauma.
- Know basic surgical techniques for trauma surgery.
- Know basic cardiorespiratory anatomy and physiology as well as pathophysiology, assessment, and its management as it relates to trauma.
- Know basic gastrointestinal anatomy and physiology as well as pathophysiology, assessment, and its management as it relates to trauma.
- Know the basic anatomy and physiology of the endocrine system as well as its pathophysiology, assessment, and management as it relates to trauma.
- Know the basic anatomy and physiology of the hepatobiliary system as well as its pathophysiology, assessment, and management as it relates to trauma. Know the basic anatomy and physiology of the genitourinary system as well as its pathophysiology, assessment, and management as it relates to trauma.
- Know the basic anatomy and physiology of the female reproductive system as well as its pathophysiology, assessment, and management as it relates to trauma and critical care. Know the basic anatomy of the musculoskeletal system, as well as its pathophysiology, assessment, and management as it relates to trauma.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Describe the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in surgical practice including cardiac medications, analgesics, local anesthetics, antibiotics, anticoagulants, ant-inflammatory agents, diuretics, chemotherapy agents, psychotropic medications, respiratory drugs, laxatives, and amnestic
- Adjust drug dosages related to specific metabolic abnormalities including renal and hepatic dysfunction.
- Participate actively in cardiopulmonary resuscitation.
- Assess factors that can impair wound healing as they relate to the trauma environment.
- Recognize postoperative wound healing problems such as wound infection, hematoma and fascial dehiscence.
- Participate in surgical procedures for trauma.
- Identify patients with compromised immune systems due to medications or underlying diseases.
- Immunize patients appropriately for tetanus and hepatitis.
- Know when to pan-culture patients with suspected infections.
- Detect severe and/or deep infections using physical examination and radiographic modalities and understand the urgency required in treating specific problems.
- Appropriately use sterile technique and infection control practices.
- Know when to evaluate patients with possible trauma or pathology of the genitourinary system with CT scan, IVP, and retrograde urethrogram.
- Evaluate and provide initial treatment for patients with urinary retention and urinary tract infections.
- Evaluate a patient for trauma to the male and female genital structures.
- Recognize and describe the initial management of inhalation injury and provide critical care for burned patients.
- Manage patients after gastric, gastrointestinal, hepatic, splenic, pancreatic, biliary tree, and orthopaedic surgery.
- Identify and treat common metabolic disturbances seen among trauma patients and identify their causes.
- Assess coagulation abnormalities both through history and physical examination and laboratory.
- Determine common sources of loss for fluid and electrolytes and replace fluids and electrolytes appropriately.
- Use blood transfusions appropriately and recognize transfusion reactions and complications of massive transfusions.
- Appropriately use and monitor anticoagulation therapy.
- Assess anesthetic risks through history and physical examination and with appropriate laboratory tests when necessary.
- Intubate a patient.
- Differentiate various etiologies for shock and treat them appropriately.
- Identify and describe management of patients with failing organ systems.
- Identify indications for invasive hemodynamic monitoring.
- Provide prophylaxis against infection and thromboembolic problems.
- Identify the indications for intubation and mechanical ventilation.
- Use history and physical exam as well as scoring systems to evaluate trauma severity.
- Evaluate and perform initial management of patients with blunt or penetrating trauma to the head and neck, chest, abdomen, and extremities.
- Identify indications for emergency surgical intervention.
- Estimate extracellular fluid volume, intravascular volume and total body water in critical care and trauma patients.
- Identify sources of surgical infection and appropriately use sterile technique to minimize infectious risks.
- Know the appropriate uses for most surgical instruments and suture types.
- Obtain an informed consent and be aware of legal and ethical issues regarding patient
management and end of life issues in the trauma environment.

**Measurement:** Faculty rotation evaluation

### Core Competency Medical Knowledge

**Goals:**
- Understand basic cellular structure and function as it relates to trauma.
- Understand basic principles involved in nutrition as it relates to trauma.
- Know basic principles involved in the radiographic evaluation of trauma. Understand basic principles of biostatistics and outcomes assessment as they relate to trauma.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Identify cellular structures and outline cellular activities involved in mitosis, protein synthesis and overall metabolism as they relate to the trauma environment.
- Describe cellular signaling including the functions of various cytokines as they relate to the trauma environment.
- Recognize the role of radiographic evaluations in trauma patients

**Measurement:** Faculty rotation evaluation

### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the perioperative management of trauma patients.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective**
- Critically evaluate the effectiveness of the perioperative management of trauma patients.

**Measurement:** Faculty rotation evaluation
**Core Competency Interpersonal and Communication Skills**

**Goals:**
- Know how to interact in an effective manner with all personnel in hospital environment involved in the perioperative care of trauma patients.
- Know how to communicate effectively and appropriately with trauma patients and their families.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in hospital environment involved in the perioperative care of trauma care patients.
- Demonstrate effective and culturally competent communication skills with trauma patients and their families.

**Measurement:** Faculty rotation evaluation

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**Core Competency Professionalism**

**Goal:**
- Know how to act in a professional and ethical fashion

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective:**
- Demonstrate professional behavior, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation

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**Core Competency Systems-based Practice**

**Goal:**
- Know how to utilize available resources to maximize the care of the trauma patient.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective:**
- Demonstrate how to utilize available resources to maximize the care of the trauma patient.

**Measurement:** Faculty rotation evaluation
**General Surgery/SICU**

The rotation is one month in length. Residents are expected to participate in the care of patients in the surgical care unit. The residents are under the close supervision of general surgery faculty. There is one orthopaedic resident on the service at a time; the remainder of the service is comprised of general surgery residents. Didactic sessions are arranged by the Department of General Surgery.

<table>
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<th>Core Competency: Patient Care</th>
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<tbody>
<tr>
<td><strong>Goals:</strong></td>
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<tr>
<td>• Know basic principles of critical care management.</td>
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<td>• Know how to manage common as well as more complex clinical problems pharmacologically.</td>
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<td>• Know basic cardiorespiratory anatomy and physiology as well as pathophysiology, assessment, and its management as it relates to critical care.</td>
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<td>• Know the basic anatomy and physiology of the female reproductive system as well as its pathophysiology, assessment, and management as it relates to critical care.</td>
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<tr>
<td>• Know the basic anatomy of the musculoskeletal system, as well as its pathophysiology, assessment, and management as it relates to critical care.</td>
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**PGY1 will demonstrate beginning competency in the following objectives**

<table>
<thead>
<tr>
<th>Objectives:</th>
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<tr>
<td>• Identify signs, symptoms and laboratory abnormalities associated with malnutrition as they relate to the critical care environments.</td>
</tr>
<tr>
<td>• Perform a nutritional assessment, describe indications for clinical support, and provide nutritional support using both the venous or enteral routes and participate in the training of medical and allied health students about nutritional principles.</td>
</tr>
<tr>
<td>• Modify nutritional support for patients with significant concurrent problems including renal disease, liver disease, cardiac disease and diabetes in the critical care environment.</td>
</tr>
<tr>
<td>• Recognize and describe the management of complications of nutritional support such as metabolic abnormalities, pneumothorax, venous thrombosis or embolic phenomena.</td>
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<td>• Describe the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in surgical practice including cardiac medications, analgesics, local anesthetics, antibiotics, anticoagulants, ant-inflammatory agents, diuretics, chemotherapy agents, psychotropic medications, respiratory drugs, laxatives, and amnestic.</td>
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</table>
• Adjust drug dosages related to specific metabolic abnormalities including renal and hepatic dysfunction.
• Participate actively in cardiopulmonary resuscitation.
• Assess factors that can impair wound healing as they relate to the critical care environment.
• Identify patients with compromised immune systems due to medications or underlying diseases.
• Immunize patients appropriately for tetanus and hepatitis.
• Know when to pan-culture patients with suspected infections.
• Detect severe and/or deep infections using physical examination and radiographic modalities and understand the urgency required in treating specific problems.
• Appropriately use sterile technique and infection control practices.
• Evaluate and provide initial treatment for patients with urinary retention and urinary tract infections.
• Recognize and describe the initial management of inhalation injury and provide critical care for burned patients.
• Manage patients after gastric, gastrointestinal, hepatic, splenic, pancreatic, biliary tree, and orthopaedic surgery.
• Identify and treat common metabolic disturbances seen among critical care patients and identify their causes.
• Assess coagulation abnormalities both through history and physical examination and laboratory.
• Determine common sources of loss for fluid and electrolytes and replace fluids and electrolytes appropriately.
• Use blood transfusions appropriately and recognize transfusion reactions and complications of massive transfusions.
• Appropriately use and monitor anticoagulation therapy.
• Assess anesthetic risks through history and physical examination and with appropriate laboratory tests when necessary.
• Intubate a patient.
• Differentiate various etiologies for shock and treat them appropriately.
• Identify and describe management of patients with failing organ systems.
• Identify indications for invasive hemodynamic monitoring.
• Provide prophylaxis against infection and thromboembolic problems.
• Identify the indications for intubation and mechanical ventilation.
• Use history and physical exam as well as scoring systems to evaluate trauma severity.
• Evaluate and perform initial management of patients with blunt or penetrating trauma to the head and neck, chest, abdomen, and extremities.
• Identify indications for emergency surgical intervention.
• Estimate extracellular fluid volume, intravascular volume and total body water in critical care and trauma patients.
• Identify sources of surgical infection and appropriately use sterile technique to minimize infectious risks.
• Obtain an informed consent and be aware of legal and ethical issues regarding patient management and end of life issues in the critical care environments.
**Measurement:** Faculty rotation evaluation

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### Core Competency Medical Knowledge

**Goals:**
- Understand basic cellular structure and function as it relates to critical care.
- Understand basic principles involved in nutrition as it relates to critical care.
- Know basic principles involved in the radiographic evaluation of trauma. Understand basic principles of biostatistics and outcomes assessment as they relate to critical care.

**PGY1 will demonstrate beginning competency in the following objectives**

**Objectives:**
- Identify cellular structures and outline cellular activities involved in mitosis, protein synthesis and overall metabolism as they relate to the critical care environment.
- Describe cellular signaling including the functions of various cytokines as they relate to the critical care environments.
- Recognize the role of radiographic evaluations in critical care patients

**Measurement:** Faculty rotation evaluation

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### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the perioperative management of critical care patients.

**PGY1 will demonstrate beginning competency in the following objectives**

**Objective**
- Critically evaluate the effectiveness of the perioperative management of critical care patients.

**Measurement:** Faculty rotation evaluation

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### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in hospital environment involved in the perioperative care of critical care patients.
- Know now to communicate effectively and appropriately with critical care patients and their families

**PGY1 will demonstrate beginning competency in the following objectives**

**Objectives:**
- Interact in an effective manner with all personnel in hospital environment involved in the
perioperative care of critical care patients.
- Demonstrate effective and culturally competent communication skills with critical care patients and their families.

**Measurement:** Faculty rotation evaluation

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<tr>
<td><strong>Objective:</strong></td>
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<td>- Demonstrate professional behavior, including altruism and a commitment to lifelong learning.</td>
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**Measurement:** Faculty rotation evaluation

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<th>Core Competency Systems-based Practice</th>
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<tbody>
<tr>
<td><strong>Goal:</strong></td>
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<tr>
<td>- Know how to utilize available resources to maximize the care of the critical care patient.</td>
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*PGY1 will demonstrate beginning competency in the following objectives*

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**Measurement:** Faculty rotation evaluation
Musculoskeletal Radiology

Orthopaedic interns will spend one month on musculoskeletal radiology, under the close supervision of musculoskeletal radiology faculty. The other residents on the rotation are from the radiology program. The goals of the rotation are to enhance knowledge of the roles and limitations of specific imaging modalities and enhanced skills in interpreting relevant musculoskeletal images, including conventional radiographs, computed tomography, and magnetic resonance imaging of the spine, pelvis, and extremities. This rotation will occur in the spring of the intern year, after the intern has had exposure to the clinical presentation of common musculoskeletal conditions. The residents will participate in reviewing films of out-patients and in-patients. Orthopaedic residents will be expected to review cases of conventional radiographs with the radiology junior resident, prior to working with more senior residents or radiology faculty. They will review cross-sectional imaging studies with radiology senior residents and faculty. However, the orthopaedic residents will not be expected to formally read or dictate cases. The orthopaedic residents will need to be proactive in seeking out cases for educational purposes. They will be expected to attend the Department of Orthopaedic Surgery radiology conferences on Tuesday mornings, “classic case” teaching conferences on Wednesday, Thursday, and Friday mornings, monthly combined rheumatology/radiology conference on Friday morning, and the bi-monthly musculoskeletal radiology teaching conference. By the end of the rotation, the orthopaedic intern will be expected to develop a 30 minute or longer PowerPoint presentation of at least four (4) cases that during the month were thought to be interesting or demonstrated significant teaching points, to be presented to radiology and orthopaedic surgery faculty.

<table>
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<th>Core Competency: Patient Care</th>
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<tbody>
<tr>
<td><strong>Goal:</strong></td>
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<tr>
<td>• Know the utility of specific imaging modalities in the evaluation of patients with common musculoskeletal conditions.</td>
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*PGY1 will demonstrate beginning competency in the following objectives*

<table>
<thead>
<tr>
<th>Objectives:</th>
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<tbody>
<tr>
<td>• identify appropriate studies for a given clinical situation</td>
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<tr>
<td>• understand the limits of particular imaging modalities</td>
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| Measurement: Faculty rotation evaluation |
### Core Competency Medical Knowledge

**Goals:**
- Know the basic principles involved in the radiographic evaluation of common musculoskeletal problems.
- Know the radiographic appearance of normal and abnormal (e.g., fractures, dislocations) musculoskeletal structures.
- Know the differences in information obtained and limitations among radiographic studies.
- Know how various radiographic studies are obtained and potential complications from these studies.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- identify anatomic structures on conventional radiographs, CT, and MRI
- compare and contrast appearance of these structures on various imaging modalities
- identify areas of concern on imaging modalities
- become proficient in radiology jargon and description of images

**Measurement:** Faculty rotation evaluation

### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the utility and efficacy of various radiographic studies in the management of patients with musculoskeletal conditions.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- evaluate effectiveness of various imaging modalities in providing the information sought by the treating physician
- understand the need for additional imaging modalities in complicated cases
- Demonstrate the ability to locate, critically appraise, and assimilate evidence from scientific studies related to his/her patients’ health problems

**Measurement:** Faculty rotation evaluation
### Core Competency Interpersonal and Communication Skills

**Goal:**
- Know how to interact with all personnel involved in the care of patients with musculoskeletal conditions, patients, and families in an effective manner in the hospital and out-patient environments.
- Understand the need for clear communication between treating physicians and radiologists.

*PGY1 will demonstrate beginning competency in the following objectives.*

**Objectives:**
- Demonstrate appropriate interactions with personnel, patients, and families. Demonstrate proficiency in radiology jargon.
- Demonstrate appropriate communication skills with treating physicians and their teams.

**Measurement:** Faculty rotation evaluation

### Core Competency Professionalism

**Goal:**
- Demonstrate all elements of professionalism, including altruism and commitment to lifelong learning.

*PGY1 will demonstrate beginning competency in the following objectives.*

**Objectives:**
- Attend all scheduled conferences
- Participate in conferences
- Seek out cases to enhance education

**Measurement:** Faculty rotation evaluation

### Core Competency Systems-based Practice

**Goal:**
- Know how to utilize available resources to address specific patient needs and develop awareness of evidence-based, cost-conscious strategies to optimize care delivery.

*PGY1 will demonstrate beginning competency in the following objectives.*

**Objectives:**
- Understand the cost differential among imaging studies
- Understand the most cost-effective manner to obtain necessary accurate clinical information

**Measurement:** Faculty rotation evaluation
Neurological Surgery Rotation

The rotation is one month in length. Residents are expected to participate in out-patient clinics and in-patient care, as determined by the Department of Neurosurgery. The residents are under the close supervision of neurosurgery faculty. There is one orthopaedic surgery resident on the service at a time; the remainder of the residents are from the neurosurgery program. Didactic sessions are arranged by the Department of Neurosurgery.

Core Competency: Patient Care

Goal:
- Gain an understanding of continuum of patient care for the neurological surgery patient

*PGY1 will demonstrate beginning competency in the following objectives:*

Objectives:
- Gather and understand essential patient information in a timely manner
- Generate an appropriate differential diagnosis
- Develop basic pre and post neurosurgical care plan of patients
- Develop basic sterile and operative technique
- Form appropriate treatment plans for a neurosurgical patient

Measurement: Faculty rotation evaluation

Core Competency: Medical Knowledge

Goal:
- Know basic principles for evaluation of neurological emergencies and demonstrate basic neurosurgical knowledge, especially the components of a complete neurologic examination
- Know basic principles of common neurosurgical diseases and treatment procedures

*PGY1 will demonstrate beginning competency in the following objectives.*

Objectives:
- Synthesize and properly utilize acquired patient data
- Identify neurosurgical emergencies
- Possess general neurosurgical knowledge, especially spinal conditions and neurologic and spinal examinations
- Demonstrate proficiency in a spinal examination.

Measurement: Faculty rotation evaluation
<table>
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<tr>
<td>• Develop an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care</td>
</tr>
<tr>
<td><strong>PGY1 will demonstrate beginning competency in the following objectives.</strong></td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>• Practice cost-effective health care and resource allocation without compromising quality of care.</td>
</tr>
<tr>
<td>• Advocate, coordinate, and facilitate appropriate patient care.</td>
</tr>
<tr>
<td><strong>Measurement:</strong> Faculty rotation evaluation</td>
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<table>
<thead>
<tr>
<th>Core Competency: Interpersonal and Communication Skills</th>
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</thead>
<tbody>
<tr>
<td><strong>Goal:</strong></td>
</tr>
<tr>
<td>• The PGY1 resident will demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.</td>
</tr>
<tr>
<td><strong>PGY1 will demonstrate beginning competency in the following objectives</strong></td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>• Communicate and work effectively with members of a health care team.</td>
</tr>
<tr>
<td>• Develop effective written communication skills through timely completion of required medical records.</td>
</tr>
<tr>
<td>• Respond appropriately to requests for exchange of information by answering pages and participating in consults.</td>
</tr>
<tr>
<td>• Be able to communicate CT, MRI and physical exam findings with upper level resident</td>
</tr>
<tr>
<td>• Participate as a member of a healthcare team</td>
</tr>
<tr>
<td><strong>Measurement:</strong> Faculty rotation evaluation</td>
</tr>
</tbody>
</table>
### Core Competency: Professionalism

**Goal:**
- The PGY1 resident will demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Demonstrate sensitivity and adherence to ethical principles when responding to a patients’ pain, emotional state, and diversity, including culture, ethnicity, gender, age, and socio-economic status
- Maintain a calm, even temperament and manage stress effectively.
- Exemplify integrity and a commitment to patients that supersedes self-interest.
- Maintain confidentiality and autonomy of patients and their families.
- Acquire and maintain high standards of professional and ethical conduct
- Demonstrate professional interactions with attendings, peers, allied health professionals and other services
- Accept responsibility and accountability
- Facilitate the learning of students and other health care professionals
- Demonstrate life-long commitment to learning

**Measurement:** Faculty rotation evaluation

### Core Competency: Practice-Based Learning and Improvement

**Goal:**
- The PGY1 resident will demonstrate the ability to investigate and evaluate his/her care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective:**
- Apply basic and clinical neuroscience to the care of patients.
- Demonstrate the ability to locate, critically appraise, and assimilate evidence from scientific studies related to his/her patients’ health problems.
- Analyze and assess practice experience and perform practice-based improvement
- Locate, appraise, and utilize scientific evidence related to patients’ health care problems

**Measurement:** Faculty rotation evaluation
**Orthopaedic Surgery Rotation**

The residents are on the service one month at a time for up to 3 separate months. They participate in out-patient and in-patient care, depending on the activities of the assigned faculty, as well as working with more senior residents in the evaluation and treatment of orthopaedic patients in the emergency department. The residents are under the close supervision of the faculty; the level of the other orthopaedic residents on the service depends on which service the resident is placed. The residents work with faculty and more senior residents to learn musculoskeletal pathophysiology, examination skills, basic surgical techniques, and perioperative patient management. Didactic sessions include the Tuesday indications conference and the Wednesday core lecture conference/journal clubs.

<table>
<thead>
<tr>
<th>Core Competency: Patient Care</th>
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<tbody>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>* Know the pathophysiology, assessment, and management of basic musculoskeletal system problems and particularly traumatic injuries.</td>
</tr>
<tr>
<td>* Know basic surgical techniques related to orthopaedic surgery.</td>
</tr>
<tr>
<td>* Know the most common orthopaedic emergencies and their initial management.</td>
</tr>
<tr>
<td>* Know the technique of basic musculoskeletal and neurologic examinations</td>
</tr>
</tbody>
</table>

*PGY1 will demonstrate beginning competency in the following objectives*

<table>
<thead>
<tr>
<th>Objectives:</th>
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<tbody>
<tr>
<td>* Recognize postoperative wound healing problems such as wound infection and hematoma.</td>
</tr>
<tr>
<td>* Appropriately use sterile technique and infection control practices in the orthopaedic environment</td>
</tr>
<tr>
<td>* Understand the indications for and provide appropriate prophylaxis against infection and thromboembolic problems.</td>
</tr>
<tr>
<td>* Evaluate and perform initial management of patients with blunt or penetrating trauma to the musculoskeletal system.</td>
</tr>
<tr>
<td>* Understand the etiology, presentation, and treatment of compartment syndrome.</td>
</tr>
<tr>
<td>* Identify when to measure compartment pressures, demonstrate competence in performing the measurement, and know how to perform a fasciotomy.</td>
</tr>
<tr>
<td>* Identify and describe common fractures and dislocations using physical examination and appropriate radiographic tests.</td>
</tr>
<tr>
<td>* Identify and describe and initiate appropriate management of open fractures, open joints, dislocations, and cauda equine syndrome.</td>
</tr>
<tr>
<td>* Recognize indications for emergency surgical intervention for musculoskeletal conditions.</td>
</tr>
<tr>
<td>* Demonstrate the ability to perform thorough extremity, spinal, and neurologic examinations.</td>
</tr>
<tr>
<td>* Recognize the role of radiographic evaluations for musculoskeletal pathology.</td>
</tr>
<tr>
<td>* Position and prepare a patient for surgery in the operating room for orthopaedic procedures.</td>
</tr>
<tr>
<td>* Close orthopaedic surgical wounds in a satisfactory fashion using sutures and staples using appropriate surgical technique.</td>
</tr>
<tr>
<td>* Demonstrate competency in major joint aspiration and injection</td>
</tr>
</tbody>
</table>
**Measurement:** Faculty rotation evaluation

### Core Competency Medical Knowledge

**Goals:**
- Understand basic cellular structure and function as it relates to musculoskeletal system.
- Know the basic genetics, embryology, anatomy and physiology of the musculoskeletal system.
- Know basic principles involved in the radiographic evaluation of musculoskeletal problems
- Know the pharmacology of drugs commonly used in orthopaedic surgery practice

**PGY1 will demonstrate beginning competency in the following objectives**

**Objectives:**
- Identify cellular structures and outline cellular activities and cellular signaling including the functions of various cytokines as it relates to the musculoskeletal system.
- Describe the pathophysiology of basic musculoskeletal conditions
- Demonstrate knowledge of musculoskeletal anatomy, grossly and radiographically
- Describe the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in orthopaedic surgical practice, including analgesics, local anesthetics, antibiotics, anticoagulants, ant-inflammatory agents, diuretics, laxatives, and amnestic.
- Describe factors that can impair wound and bone healing.
- Describe the appropriate use of musculoskeletal imaging modalities

**Measurement:** Faculty rotation evaluation, Orthopaedic In-Training Examination

### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the perioperative management of orthopaedic patients.
- Develop the ability to investigate and evaluate his/her care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning

**PGY1 will demonstrate beginning competency in the following objectives**

**Objective:**
- Apply basic and clinical science to the care of patients with musculoskeletal conditions
- Demonstrate the ability to locate, critically appraise, and assimilate evidence from the literature related to his/her patients’ musculoskeletal-related conditions
- Critically evaluate the effectiveness of management of orthopaedic patients.

**Measurement:** Faculty rotation evaluation
### Core Competency Interpersonal and Communication Skills

#### Goals:
- Knows how to interact in an effective manner with all personnel in hospital and out-patient environments involved in the care of orthopaedic patients.
- Know how to effectively and appropriately communicate with orthopaedic patients and their families.
- Demonstrates culturally competent communication skills during interactions with colleagues, hospital personnel, patients, and families.

**PGY1 will demonstrate beginning competency in the following objectives**

#### Objective:
- Interacts in an effective manner with all personnel in hospital and out-patient environments involved in the care of orthopaedic patients.
- Demonstrate appropriate, effective, culturally competent communication skills with orthopaedic patients and their families.

**Measurement:** Faculty rotation evaluation

### Core Competency Professionalism

#### Goal:
- Know how to act in a professional and ethical fashion.

**PGY1 will demonstrate beginning competency in the following objectives**

#### Objective:
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation

### Core Competency Systems-based Practice

#### Goal:
- Knows how to utilize available resources to maximize the care of orthopaedic patients.
- Advocate, coordinate, and facilitate appropriate patient care.

**PGY1 will demonstrate beginning competency in the following objectives**

#### Objective:
- Utilize available resources to maximize the care of orthopaedic patients.

**Measurement:** Faculty rotation evaluation
Plastic Surgery Rotation
The plastic surgery rotation is one month in length. Orthopaedic residents are expected to attend outpatient clinics, as determined by the plastic surgery faculty, as well as to participate in in-patient care. The residents are under the close supervision of the plastic surgery faculty. There is one orthopaedic resident on the service at a time; the remainder of the service is comprised of plastic surgery residents. Didactic sessions are arranged by the plastic surgery department.

<table>
<thead>
<tr>
<th>Core Competency: Patient Care</th>
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<tbody>
<tr>
<td>Goals:</td>
</tr>
<tr>
<td>• Know how to manage common clinical problems pharmacologically.</td>
</tr>
<tr>
<td>• Know how to recognize and manage surgical infection.</td>
</tr>
<tr>
<td>• Know and demonstrate basic wound closure and soft tissue handling</td>
</tr>
<tr>
<td>• Know basic principles involved in the radiographic evaluation of clinical problems in plastic surgery.</td>
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</table>

PGY1 will demonstrate beginning competency in the following objectives

<table>
<thead>
<tr>
<th>Objectives:</th>
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<tbody>
<tr>
<td>• Recognize postoperative wound healing problems such as wound infection, hematoma, and fascial dehiscence</td>
</tr>
<tr>
<td>• Describe wound management techniques for incisional wounds, partial thickness injuries, and full thickness wounds.</td>
</tr>
<tr>
<td>• Identify patients with compromised immune systems due to medications or underlying diseases.</td>
</tr>
<tr>
<td>• Identify when to pan-culture patients with suspected infections.</td>
</tr>
<tr>
<td>• Treat common soft tissues infections, acquired both from the community and in the postoperative setting.</td>
</tr>
<tr>
<td>• Demonstrate appropriate sterile technique and infection control practices.</td>
</tr>
<tr>
<td>• Assess coagulation abnormalities both through history and physical examination and laboratory tests.</td>
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<tr>
<td>• Use blood transfusions appropriately and recognize transfusion reactions and complications of massive transfusions.</td>
</tr>
<tr>
<td>• Assess anesthetic risks through history and physical examination and with appropriate laboratory tests when necessary.</td>
</tr>
<tr>
<td>• Provide prophylaxis against infection and thromboembolic problems.</td>
</tr>
<tr>
<td>• Evaluate and perform initial management of patients with blunt or penetrating trauma to the and upper and lower extremities.</td>
</tr>
<tr>
<td>• Position and prepare a patient for surgery in the operating room for Plastic Surgery procedures.</td>
</tr>
<tr>
<td>• Obtain an informed consent and be aware of legal and ethical issues regarding patient management and end of life issues.</td>
</tr>
<tr>
<td>• Diagnose and know the treatment of common skin infections.</td>
</tr>
<tr>
<td>• Provide initial treatment for patients with burns including evaluation of extent of injury.</td>
</tr>
<tr>
<td>• Identify indications for escharotomy.</td>
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• Provide burn wound care including dressing changes and describe surgical management.

**Measurement:** Faculty rotation evaluation

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**Core Competency Medical Knowledge**

**Goals:**
- Understand basic cellular structure and function as it applies to plastic surgery.
- Know the basic principles of wound healing.
- Know the basic anatomy and physiology of the integument as well as its pathophysiology, assessment, and management.
- Know the pharmacology of drugs commonly used in surgical practice.
- Understand basic principles of biostatistics and outcomes.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Identify cellular structures and outline cellular activities involved in mitosis and protein synthesis.
- Describe cellular signaling including the functions of various cytokines.
- Describe the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in surgical practice including cardiac medications, analgesics, local anesthetics, antibiotics, anticoagulants, ant-inflammatory agents, diuretics, psychotropic medications, respiratory drugs, laxatives and amnestics.
- Assess factors that can impair wound healing.
- Close surgical wounds in a satisfactory fashion using sutures, staples, tapes, and tissue adhesives.
- Demonstrate the appropriate uses for common surgical instruments and suture types.
- Utilize good basic surgical technique

**Measurement:** Faculty rotation evaluation

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**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Know how to critically evaluate the effectiveness of the perioperative patient management of Plastic Surgery patients

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective**
- Critically evaluate the effectiveness of their patient management
- Demonstrate the ability to locate, critically appraise, and assimilate evidence from scientific studies related to his/her patients’ health problems

**Measurement:** Faculty rotation evaluation
Core Competency Interpersonal and Communication Skills

Goal:
- Knows how to interact in an effective manner with all personnel, patients, and families in the hospital environment involved in the perioperative care of Plastic Surgery patients.

PGY1 will demonstrate beginning competency in the following objectives

Objectives:
- Demonstrate ability to interact in an effective manner with all personnel in the ED, OR, burn unit, and SICU environments.
- Demonstrate effective, appropriate, and culturally competent communication skills.

Measurement: Faculty rotation evaluation

Core Competency Professionalism

Goal:
- Demonstrate all elements of professionalism, including altruism and commitment to lifelong learning

PGY1 will demonstrate beginning competency in the following objectives

Objective:
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning.

Measurement: Faculty rotation evaluation

Core Competency Systems-based Practice

Goal:
- Know how to utilize available resources to address specific patient needs during the perioperative period

PGY1 will demonstrate beginning competency in the following objectives

Objective:
- Demonstrate the ability to utilize available resources to maximize the care of the plastic surgery patient.
- Advocate, coordinate, and facilitate appropriate patient care.

Measurement: Faculty rotation evaluation
Dept. of Rehabilitative Medicine, Inpatient Unit Rotation

The physiatry rotation is one month in length. Orthopaedic residents are expected to attend outpatient clinic five days per week, as well as interact with inpatients. They are under the close supervision of physiatry faculty. There is one orthopaedic resident on the rotation at a time; the remainder of the service is comprised of physiatry residents. Didactic sessions are those arranged by the physiatry department.

Core Competency Patient Care:

Goals:
- Gain understanding in how patients transition to Inpatient Rehabilitation Medicine, and the differences among inpatient rehabilitation patient care, out-patient rehabilitation, and acute care.
- Recognize the impact of physical, cognitive, and psychosocial impairments in rehabilitation patients with acute and chronic medical problems, musculoskeletal injuries, and disabilities.

PGY1 will demonstrate beginning competency in the following objectives.

Objectives:
- Perform a rehabilitation medicine focused admission history and physical examination.
- With attending supervision, admit and function as the primary care provider for inpatients on the rehab unit. Residents are responsible for all administrative care related to their patients including but not limited to daily progress notes, discharge summaries, team rounds summaries, daily patient medication orders, comprehensive therapy orders, and team and/or family conference attendance.
- Create a differential diagnosis appropriate to the physical findings and history.
- Generate a comprehensive problem list.
- Incorporate pertinent medical issues into therapy orders in order to precisely define patient precautions.
- With attending supervision, select appropriate orthotics, prosthetics, and durable medical equipment for inpatient rehabilitation patients.
- Utilize consultants to help manage acute and chronic medical problems.
- Recognize when an acutely ill patient requires transfer to a more intensive level of care.

Measurement: Faculty rotation evaluation
### Core Competency: Medical Knowledge:

**Goal:**
- Learn physiatric management of patients with common physiatric diagnoses.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Describe appropriate indications and parameters for CPM utilization following total knee arthroplasty.
- Describe precautions to prevent dislocation following total hip arthroplasty, depending upon surgical approach utilized.
- Describe appropriate thromboembolic prophylaxis anticoagulation for the orthopaedic patient.
- Manage blood sugars and blood pressures appropriately on the rehabilitation unit.
- Read an EKG in a patient with acute chest pain.
- Diagnose and treat acute chest pain.
- Evaluate, diagnose, and treat acute shortness of breath.
- Characterize the benefits and specific risks of medications used in geriatric patients, including polypharmacy.
- Prescribe pain medications for patients cared on the comprehensive rehabilitation service, including post-operative patients.
- Demonstrate how to treat bowel dysfunction in patients who are not suffering from neurogenic bowel.
- Demonstrate how to treat bladder dysfunction in patients who are not suffering from Neurogenic bladder.
- Diagnose and treat sources of fever, wound drainage, and post-operative pain.
- Identify common medical complications of the orthopaedic patient that occur during inpatient rehabilitation.
- Describe risk factors for falls and measures for fall prevention.

**Measurement:** Faculty rotation evaluation

### Core Competency: Interpersonal and Communication Skills

**Goal:**
- Develop effective, culturally appropriate communication and listening skills with patients, family and health care providers.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Establish trust and maintain rapport with patients and family. Serve as primary source of information for family.
- Complete all chart notes and dictations in a timely manner.
- Present material clearly and accurately to patients and family.
- Effectively communicate verbally and in writing patient needs to all staff and referring
physicians involved with the patient.

- Utilize effective listening skills.
- Participate in rounds and discussions.
- Present findings clearly and concisely to supervising faculty so management can be discussed.
- Demonstrate appropriate interpersonal skills, compassion, and leadership skills in the patient care conference and multidisciplinary team conference.
- Write adequately detailed therapy prescriptions that are based on functional goals for physiatric management.
- Discuss issues such as prognosis, and address return to school/work/home issues with families and patients.
- Lead an interdisciplinary team, formulate goals and care plans.
- Develop effective listening skills.
- Demonstrate culturally appropriate communication skills.

**Measurement:** Faculty rotation evaluation

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**Core Competency: Practice-based Learning and Improvement**

**Goals:**

- Develop self evaluation of exam skills and knowledge.
- Learn basic research methodology in support of patient management and how to apply these findings in treatment decisions.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objectives:**

- Evaluate personal exam skills and personal knowledge, identify gaps and incorporate feedback from others for learning and improvement.
- Investigate and apply evidence from scientific studies to enhance patient care throughout the rotation.
- Use information technology (computers, journals, etc.) to access and manage patient information and to support their own education and treatment decisions.
- Review the literature for “Best Practices” in the above areas of Medical Knowledge and Patient Care.
- Contribute their findings to discussions on the care of the patient with other health care professionals.
- Save their reports from early in the rotation and compare them to those done later in the rotation.
- Investigate the outcomes of their treatment decisions.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Facilitate the learning of students, other residents, and related allied health care professionals.

**Measurement:** Faculty rotation evaluation
Core Competency: Professionalism

Goal:

- Demonstrate accountability, punctuality, and an understanding of cultural diversity among patients and health care team, and patient advocacy

PGY1 will demonstrate beginning competency in the following objectives

Objectives:

- Exemplify respect and compassion towards patients.
- Show reliability, punctuality, integrity, and honesty.
- Respect patient privacy and autonomy.
- Accept responsibility for actions and decisions.
- Show responsiveness to patient needs that supersedes self interest.
- Apply sound ethical principles in practice, including patient confidentiality, informed consent and provision, withholding of care, and interactions with insurance or disability agencies.
- Consider the effects of personal, social, and cultural factors in the disease process and patient management.
- Demonstrate sensitivity to patients of different ages, social status, races, and genders.
- Perform duties with a professional supportive attitude demonstrating mutual respect for patients, family, rehabilitation team members, and other healthcare professionals.
- Wear appropriate attire for a professional appearance.
- Treat all colleagues with respect and ensure proper communication supporting a professional environment.
- Promote respect, dignity, and compassion for patients and their families.
- Develop professional relationships with referring physicians, therapists, and ancillary health care providers to facilitate timely and effective medical and rehabilitation care
- Accept feedback professionally.

Measurement: Faculty rotation evaluation

Core Competency: System-Based Practice:

Goal:

- Develop an understanding of the impacts of patient/family socioeconomic issues and collaboration with other healthcare professionals on rehabilitation and care management decision making.

PGY1 will demonstrate beginning competency in the following objectives

Objectives:

- Demonstrate patient advocacy and show the ability to recognize situations in which progress is no longer occurring and problem solving these situations.
- Collaborate and work effectively with other health professionals and maintain appropriate
- Assess how their decisions affect others – patients, family, and other health care professionals.
- Integrate care of patients across hospital and community settings.
- Learn when tests are appropriate or may be under-or over-utilized.
- Identify the cost of the treatments and diagnostic tests that are ordered.
- Advocate for patients who need tests and treatment that might be denied.
- Recognize requirements as they relate to documentation, elements of the exam, and billing procedures and codes.
- Understand the unique needs of geriatric patients as they transition to home, assisted living facilities, or skilled Nursing facilities.
- Describe the role of palliative care and hospice and how rehabilitation can fit in with a patient who may ultimately be discharged to hospice.
- Explain the role of the Functional Independence Measure (FIM) in the context of inpatient rehabilitation, research goals, and third party payers.
- Describe the outcome parameters used by third party payers.
- Learn how to apply the Prospective Payment System (PPS) system.
- Learn how rehabilitation units function and maintain fiscal stability.
- Realize the limitations on the ability of geriatric patients to pay for their medications.
- Discuss code status and advance directives with patients.
- Understand the use of “CMS 13” diagnoses, why they are used, how they are applied, and the meaning of these diagnoses to the inpatient rehabilitation program.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Describe the factors involved in the decisions on length of stay, disposition, and insurance coverage.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

**Measurement:** Faculty rotation evaluation
Vascular Surgery Rotation

The rotation is one month in length. The residents participate in out-patient clinics and in-patient care. The residents are under the close supervision of vascular surgery faculty. There is one orthopaedic resident on the service at a time; the remainder of the service is comprised of general surgery residents. Didactic sessions are arranged by the Department of General Surgery and division of vascular surgery.

Core Competency: Patient Care

Goals:
- Understand basic principles involved in nutrition.
- Know the pathophysiology of common vascular conditions.
- Know how to manage common clinical problems in the vascular patient.
- Know how to recognize and manage surgical infection.
- Know basic principles involved in the radiographic and nonradiographic evaluation of vascular problems.
- Know basic vascular surgical techniques.
- Know basic perioperative management, including how to manage anemia and appropriate anticoagulation.
- Know basic fluid and electrolyte management.
- Know how to assess anesthetic peri-operative risk.

PGY1 will demonstrate beginning competency in the following objectives

Objectives:
- Perform the evaluation and describe the nonsurgical management of venous disease or lymphedema as well as the diabetic foot.
- Perform basic vascular dissection and know how to perform a vascular anastamosis
- Explain compartment syndrome etiology and evaluation and identify when a fasciotomy is indicated.
- Position and prepare a patient for surgery in the operating room for vascular surgical procedures.
- Identify sources of surgical infection and appropriately use sterile technique to minimize infection risks.
- Know the appropriate uses for most surgical instruments and suture types.
- Demonstrate appropriate basic surgical technique.
- Recognize postoperative wound healing problems such as wound infection, hematoma, and fascial dehiscence.
- Close surgical wounds in a satisfactory fashion using sutures and staples.
- Identify patients with compromised immune systems due to medications or underlying diseases.
  1. Demonstrate when to pan-culture patients with suspected infections.
  2. Appropriately use sterile technique and infection control practices.
  3. Determine common sources of loss for fluid and electrolytes and replace fluids and electrolytes
appropriately.
4. Assess coagulation abnormalities both through history and physical examination and laboratory tests.
5. Use blood transfusions appropriately and recognize transfusion reactions and complications of massive transfusions.
6. Demonstrate appropriate use and monitoring of anticoagulation therapy.
7. Assess anesthetic risks through history and physical examination and with appropriate laboratory tests when necessary.
8. Identify indications for invasive hemodynamic monitoring.
   • Provide prophylaxis against infection and thromboembolic problems.
   • Evaluate and perform initial management of patients with trauma to major blood vessels.
   • Recognize indications for emergency surgical intervention for vascular pathology.
   • Recognize the role of radiographic evaluations for acute and chronic vascular pathology.
   • Assess the vascular status of the extremities through physical examination, noninvasive studies and angiography.
   • Recognize signs and symptoms of vascular insufficiency and acute vascular obstruction.
   • Obtain an informed consent and be aware of legal and ethical issues regarding patient management and end of life issues.

Measurement: Faculty rotation evaluation

Core Competency Medical Knowledge

Goals:
• Know basic peripheral vascular anatomy and physiology as well as pathophysiology and its assessment and management.
• Know the pharmacology of drugs commonly used in surgical practice.
• Understand basic principles of biostatistics and outcomes assessment.

PGY1 will demonstrate beginning competency in the following objectives

Objectives:
• Describe basic peripheral vascular anatomy and physiology, as well as its pathophysiology and its assessment and management.
• Describe the dosage, routes of administration, metabolic pathways, major side effects of drugs used commonly in surgical practice including cardiac medications, analgesics, local anesthetics, antibiotics, anticoagulants, ant-inflammatory agents, diuretics, respiratory drugs, laxatives, and amnestics.
• Describe factors that can impair wound healing.

Measurement: Faculty rotation evaluation
### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the management of vascular patients.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective**
- Critically evaluates the effectiveness of the peri-operative management of vascular patients.
- Assesses and assimilates information from the literature concerning his/her patients’ vascular conditions.

**Measurement:** Faculty rotation evaluation

### Core Competency Interpersonal and Communication Skills

**Goal:**
- Know how to interact in an effective manner with all personnel in hospital environment involved in the peri-operative care of vascular patients.
- Know how to interact in an effective manner with vascular patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective**
- Interact in an effective manner with all personnel in the hospital environment involved in the care of vascular patients.
- Demonstrate effective and appropriate communication skills with vascular patients and their families.

**Measurement:** Faculty rotation evaluation

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*PGY1 will demonstrate beginning competency in the following objectives*

**Objective**
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning

**Measurement:** Faculty rotation evaluation
Core Competency Systems-based Practice

Goals:
- Know how to utilize available resources to maximize the care of vascular patients.
- Know the impact of disability related to vascular conditions.

PGY1 will demonstrate beginning competency in the following objectives

Objective:
- Utilize available resources to maximize the quality of care of vascular patients.

Measurement: Faculty rotation evaluation
Residents will be assigned to and evaluated in both outpatient and inpatient clinical settings.

*Competency in interpersonal and communication skills, including culturally competent skills,* with patients, families, orthopaedic faculty, fellow residents, students, and other members of the health care team will be evaluated by direct observation.

*Competency in professionalism* will be evaluated by direct observation of the resident’s ability to fulfill responsibilities in both clinical settings. These responsibilities include continuity of care, availability, responsiveness to patient or family needs, ethical treatment of patients, families, and co-workers, sensitivity to different patient populations, and a commitment to lifelong learning.

*Competency in practice-based learning* will be evaluated by direct observation. Residents are expected to demonstrate improvement in clinical and surgical skills as they gain additional experience and knowledge and as a result of direct feedback. A resident will also be evaluated on his/her ability to evaluate available evidence and in the use of evidence-based medicine. Cases will be reviewed with the faculty, one-on-one during specific rotation, as well as during the weekly indications conference and monthly Morbidity and Mortality Conference, to further develop the resident’s practice-based learning skills.

*Competency in systems-based practice* will be evaluated by direct observation of a resident’s clinical care of patients and familiarity with various health care systems (e.g., Medicare, Medicaid, VA) in both the outpatient and inpatient settings. A resident will also be evaluated for improvement in this arena during the course of his/her training.

*Competency in patient care* will be evaluated by direct observation during interactions in out-patient and in-patient settings, as well as in the operating room. Residents are expected to demonstrate increasing levels of responsibility, knowledge, and surgical skills. In the out-patient setting, resident priority should be directed toward new patients. All residents should develop and will be evaluated on their skills of taking a problem-based history and performing a detailed examination, as well as evaluation of relevant imaging studies and development of list of differential diagnoses and treatment options.

*Competency in Medical knowledge* will be assessed by direct observation and questioning in the course of patient care, questioning during x-ray/indication conference and standard lectures, and by the Orthopaedic In-Training Examination. Residents are expected to build upon previously acquired knowledge and competencies at each level of training.
ADULT RECONSTRUCTION

Depending on scheduling and training needs, residents will be assigned this rotation at different times during their training. Therefore, the level of progression is delineated by Junior Level and by Senior Level. The rotation is 3 months in length. Residents will participate in patient care in in-patient and out-patient settings, as well as in the operating room. The residents will be under close faculty supervision. Residents will be evaluated on their knowledge and treatment of patients with degenerative musculoskeletal conditions.

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

**Junior Level Residents**

**Core Competency: Patient Care**

**Goals:**
- Know how to perform a complete patient history and physical exam and develop a treatment plan for patients with degenerative conditions of the extremities, including those requiring reconstructive procedures.
- Know pathologic anatomy and biomechanics of the extremities.

*Junior level residents will demonstrate competency in the following objectives*

**Objectives:**
- Describe treatment options, including specific nonsurgical care and generalized surgical indications, for patients with degenerative conditions of the extremities.
- Demonstrate familiarity with common surgical procedures.
- Demonstrate knowledge of pathological anatomy and biomechanics.
- Demonstrate knowledge of common surgical approaches.
- Demonstrate beginning ability to provide diagnosis and formulate a proposed treatment plan for each patient, including beginning ability to
  - articulate the nature of the problem, diagnosis, and treatment alternatives
  - engage in an informed discussion about the problem

*Measurement:* Faculty rotation evaluation, direct observation

**Core Competency: Medical Knowledge:**

**Goals:**
- Know the impact of general orthopedic topics on degenerative joint conditions and reconstructive procedures.
- Know applied surgical anatomy.
- Know the pathophysiology and prevention measures for common post-operative complications.

*Junior level will demonstrate competency in the following objectives*

**Objectives:**
Demonstrate knowledge of the following topics:

**General**
- Indications, contraindication, alternatives to surgery
- Applied surgical anatomy and approaches
- Biomaterials (metals, PMMA, UHMWPE, ceramics, HA)
- Implant wear and loosening, implant biology
- Post-operative management, including complications such as dislocations, infections, thromboembolism

**Hip**
- Avascular necrosis
- Prosthetic design
- Assessment of outcomes
- Neurologic complications

**Knee**
- Biomechanics, alignment, and management of deformity
- Prosthetic design
- Assessment of outcomes

**Measurement:** Faculty rotation evaluation, direct observation, In-Training Examination.

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### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the peri-operative management of patients.

**Objective:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to clinical cases.

**Measurement:** Faculty rotation evaluation, direct observation, indications and morbidity/mortality conferences.
## Core Competency Interpersonal and Communication Skills

### Goals:
- Knows how to interact in an effective manner with all personnel in hospital environment involved in the peri-operative care of patients.
- Knows how to interact in an effective manner with patients and their families.
- Utilizes culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

*Junior level residents will demonstrate beginning competency in the following objectives*

### Objectives:
- Interact in an effective manner with all personnel in the hospital environment involved in the perioperative care of patients.
- Demonstrates effective and appropriate communication skills with patients and their families, including when obtaining informed consent.

**Measurement:** Faculty rotation evaluation, 360 evaluation

## Core Competency Professionalism

### Goal:
- Know how to act in a professional and ethical fashion.

*Junior level residents will demonstrate beginning competency in the following objectives*

### Objective:
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning

**Measurement:** Faculty rotation evaluation, 360 evaluation

## Core Competency Systems-based Practice

### Goals:
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to reconstructive procedures.

*Junior level residents will demonstrate beginning competency in the following objectives*

### Objectives:
- Understand how patient care affects other health care professionals, the health care organization, and society at-large
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Utilizes available resources to maximize the quality of care of patients.

**Measurement:** Faculty rotation evaluation, Direct observation
### Senior Level Residents

**Core Competency: Patient Care**

**Goal:**
- Know the continuum of care of patients with degenerative musculoskeletal conditions, including those requiring reconstructive procedures.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
Demonstrate knowledge of
- Specific surgical alternatives
- General potential surgical complications
- Procedure-specific complications
- Surgical techniques
- Postoperative care and rehabilitation

**Measurement:** Faculty rotation evaluation, Direct observation

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### Core Competency: Medical Knowledge

**Goal:**
- Demonstrate knowledge of musculoskeletal topics and be able to discuss the implications of these for patients undergoing surgical procedures.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
Demonstrate knowledge of musculoskeletal topics, including but not limited to the following:
- Pre-operative planning
- Choice of implants and fixation

**Hip**
- Metabolic disease
- Rheumatoid arthritis
- Congenital hip dysplasia
- Non-arthroplasty hip reconstruction
- Aseptic loosening
- Infection
- Dislocation and instability
- Ectopic bone formation
- Periprosthetic fractures
- Evaluation of painful arthroplasties
- Principles of revision hip surgery, indications, and alternatives
- Bone grafting techniques
### Knee
- Aseptic loosening
- Patellofemoral and extensor mechanism issues
- Infection
- Wound problems and soft tissue coverage
- Neurovascular complications
- Periprosthetic fractures
- Evaluation of painful arthroplasties
- Bone grafting techniques
- Principles of revision knee surgery, indications, and alternatives
- Management of bone loss and bone grafting
- Rehabilitation

**Measurement:** Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.

### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the peri-operative management of patients.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Demonstrate ability to search literature and apply evidence based medicine to personal practice and patient care.

**Measurement:** Faculty rotation evaluation, direct observation, morbidity/mortality conferences

### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in hospital environment involved in the peri-operative care of patients.
- Know how to interact in an effective manner with patients and their families.
- Utilizes culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

*Senior level residents will demonstrate continued competency in the following objectives*
Objectives:
- Interact in an effective manner with all personnel in the hospital environment involved in the perioperative care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families.

Measurement: Faculty rotation evaluation, 360 evaluation

Core Competency Professionalism

Goal:
- Know how to act in a professional and ethical fashion.

Senior level residents will demonstrate continued competency in the following objectives

Objectives:
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning

Measurement: Faculty rotation evaluation, 360 evaluation

Core Competency Systems-based Practice

Goals:
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to degenerative joint disease and reconstructive procedures.

Senior level residents will demonstrate continued competency in the following objectives

Objectives:
- Describe how patient care and other professional activities affect other health care professionals, the health care organization, and society at-large
- Describe how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Utilizes available resources to maximize the quality of care of patients.

Measurement: Faculty rotation evaluation, Direct observation
FOOT AND ANKLE

The foot and ankle rotation is 3 months in length. Depending on scheduling and training need, residents may be assigned this rotation at different times during their training. Therefore level of progression is delineated by Junior Level and by Senior Level. Residents will participate, under direct faculty supervision, in the outpatient, inpatient, and operating room settings.

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

<table>
<thead>
<tr>
<th>Junior Level Residents</th>
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<tbody>
<tr>
<td><strong>Core Competency: Patient Care</strong></td>
</tr>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>- Know how to obtain a complete history, perform a physical exam, and develop a treatment plan for patients with foot and ankle problems.</td>
</tr>
<tr>
<td>- Know detailed foot and ankle anatomy, especially in terms of surgical approaches.</td>
</tr>
<tr>
<td>- Know appropriate imaging modalities used in the care of patients with foot and ankle disorders.</td>
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<tr>
<td>- Know how to interpret imaging studies of patients with foot and ankle disorders.</td>
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</tbody>
</table>

*Junior level residents will demonstrate competency in the following objectives*

<table>
<thead>
<tr>
<th>Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Describe treatment options, including specific nonsurgical care and generalized surgical indications.</td>
</tr>
<tr>
<td>- Demonstrate knowledge of common surgical procedures.</td>
</tr>
<tr>
<td>- Demonstrate knowledge of pathological anatomy and biomechanics.</td>
</tr>
<tr>
<td>- Demonstrate knowledge of common surgical approaches.</td>
</tr>
<tr>
<td>- Demonstrate ability to complete a problem-based history and perform a detailed examination of the foot and ankle, including characterization of gait, evaluation of postural foot deformities, identification of pain location and anatomic sources, evaluation of range of motion (ankle, hindfoot, midfoot, forefoot), neurovascular status, and tendon competency, and muscle strength.</td>
</tr>
<tr>
<td>- Demonstrate ability to order and evaluate appropriate radiographs for the foot and ankle.</td>
</tr>
<tr>
<td>- Demonstrate progressive skill in evaluating normal and abnormal x-rays.</td>
</tr>
<tr>
<td>- Demonstrate beginning ability to provide diagnosis and formulate a proposed treatment plan for each patient including beginning ability to articulate the nature of the problem, diagnosis, and treatment alternatives, and ability to engage in an informed discussion about the problem.</td>
</tr>
</tbody>
</table>

| Measurement: Faculty rotation evaluation, Direct observation |

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Core Competency: Medical Knowledge:

**Goal:**
- Know the continuum of issues associated with fractures and dislocations of the foot and ankle.

*Junior level will demonstrate competency in the following objectives*

**Objectives:**
Demonstrate knowledge of the following:
- Relevant foot and ankle anatomy
- Appropriate classification schemes
- Treatment alternatives, including closed treatment of lower extremity fractures and operative treatment of ankle fractures.
- Surgical indications
- Fracture-specific complications
- Surgical techniques
- Rehabilitation
- Care of traumatic wounds
- Open fractures, compartment syndromes, and polytraumatized patients

**Goal:**
- Know the continuum of issues associated with the diagnosis and treatment of common office-based foot and ankle conditions and interventions.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objectives:**
Demonstrate knowledge of the following:
- Nail care
- Heel pain
- Conservative treatment of plantar callosities, including office debridement and the use of orthotic pads and appliances
- Shoe wear and pedorthotic devices
- Treatment of the insensate foot, including acute and chronic neuroarthropathy
- Ulcer care, including total contact casting techniques
- Injection technique, including differential blocks and joint aspiration
- Appropriate cast application
- Ankle sprains
- Common fractures of the ankle and foot
- Patient education regarding shoe wear and generalized foot care
- Sympathetically maintained pain and complex regional pain syndrome
**Goal:**
- Know the treatment options and common surgical procedures of the foot and ankle.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objectives:**
Demonstrate knowledge of the following:
- Hallux rigidus treatment, including cheilectomy and MTP arthrodesis
- Lesser toe procedures (hammer, claw, mallet)
- Nail procedures (Winograd, Heifetz, Zadik, Thompson-Terwilliger)
- Tendon lengthening and transfer procedures
- Fasciotomy of the foot and leg
- Amputations (BKA, Syme, Boyd, Charcot, Lisfranc, transmetatarsal, MTP, toe).

**Measurement:** Faculty rotation evaluation, direct observation, Orthopaedic In-Training Examination.

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**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Know how to critically evaluate the effectiveness of the operative and non-operative management of patients with foot and ankle problems.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objectives:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to clinical cases.

**Measurement:** Faculty rotation evaluation, direct observation

---

**Core Competency Interpersonal and Communication Skills**

**Goals:**
- Know how to interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients with foot and ankle conditions.
- Know how to interact in an effective manner with patients and their families.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients with foot and ankle conditions.
- Demonstrates effective and appropriate communication skills with patients and their families.
- Demonstrates culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families

**Measurement:** Faculty rotation evaluation, 360 evaluation

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**Core Competency Professionalism**
### Core Competency Systems-based Practice

**Goal:**
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to foot and ankle conditions.

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning

**Measurement:** Faculty rotation evaluation, 360 evaluation

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### Senior Level Residents

**Core Competency: Patient Care**

**Goal:**
- Possess the ability to carry out the continuum of care for patients with foot and ankle problems.

**Objectives:**
- Describe how patient care affects the health care organization and society at-large
- Describe how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Utilizes available resources to maximize the quality of patient care.

**Measurement:** Faculty rotation evaluation, Direct observation

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**Core Competency: Medical Knowledge:**

**Goal:**
- Know the spectrum of treatment and surgical procedures of the foot and ankle.
In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives

**Objectives:**
Describe the spectrum of treatment and surgical procedures, including but not be limited to the following:

- Indications for surgery
- Options and outcomes of non-surgical treatment
- Operative treatment plan for fractures of the pilon, calcaneus, and talus
- Ankle ligament reconstruction
- Ankle arthroscopy
- Hallux valgus surgery
- Hindfoot and midfoot osteotomies and arthrodeses
- Achilles and posterior tibial tendon reconstructive procedures

**Measurement:** Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.

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**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Know how to critically evaluate the effectiveness of the management of patients with foot and ankle problems.

Senior level residents will demonstrate continued competency in the following objectives

**Objective:**
- Demonstrate ability to search literature and apply evidence based medicine to personal practice and patient care.

**Measurement:** Faculty rotation evaluation, direct observation
### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients with foot and ankle disorders.
- Know how to interact in an effective manner with patients and their families.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients with foot and ankle disorders.
- Demonstrate effective and appropriate communication skills with patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluation

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluation

### Core Competency Systems-based Practice

**Goals:**
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to foot and ankle conditions.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Understand how patient care affects the health care organization and society at-large.
- Describe how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Utilize available resources to maximize the quality of patient care.

**Measurement:** Faculty rotation evaluation, direct observation
The hand and upper extremity rotation is 3 months in length. The resident will work and be evaluated in the out-patient, in-patient, and operating room settings. The residents will be under direct faculty supervision. The rotation is multi-disciplinary, including plastic surgery, as well as multi-professional, including physician assistant(s) and occupational therapists.

Depending on scheduling and training need, residents may be assigned to this rotation at different times during their training. Therefore, it is a level of progression delineated by

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

### JUNIOR LEVEL RESIDENTS

<table>
<thead>
<tr>
<th>Core Competency: Patient Care</th>
</tr>
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<tbody>
<tr>
<td><strong>Goal:</strong></td>
</tr>
<tr>
<td>- Know how to obtain a complete patient history and physical exam for common upper extremity conditions.</td>
</tr>
<tr>
<td>- Know the appropriate radiographs to obtain for common upper extremity conditions.</td>
</tr>
<tr>
<td>- Know how to interpret standard radiographs of the upper extremity.</td>
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<tr>
<td>- Know when to order and how to interpret electrodiagnostic studies.</td>
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<tr>
<td>- Know sterile technique, with the ability to appropriately prep and drape extremities</td>
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<tr>
<td>- Know appropriate soft tissue handling</td>
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<tr>
<td>- Become competent in performing standard open reduction and internal fixation of upper extremity fractures.</td>
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<tr>
<td>- Become competent in working under loop magnification and operating microscope.</td>
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<tr>
<td>- Know the technique for common upper extremity injections</td>
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<tr>
<td>- Know how to recognize and evaluate common post-operative complications.</td>
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</table>

*Junior level resident will demonstrate competency in the following objectives*

<table>
<thead>
<tr>
<th>Objectives:</th>
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</thead>
<tbody>
<tr>
<td>- Demonstrate the ability to obtain a complete patient history and physical exam.</td>
</tr>
<tr>
<td>- Demonstrate knowledge of appropriate radiographs with required views for common upper extremity clinical situations.</td>
</tr>
<tr>
<td>- Demonstrate the ability to interpret standard radiographs of the upper extremity.</td>
</tr>
<tr>
<td>- Demonstrate the ability to order and interpret appropriate electrodiagnostic studies.</td>
</tr>
<tr>
<td>- Demonstrate knowledge of sterile techniques, with the ability to prep and drape extremities</td>
</tr>
<tr>
<td>- Demonstrate technical competence in standard surgical approaches to the arm, forearm, and hand.</td>
</tr>
<tr>
<td>- Demonstrate competencies with standard open reduction and internal fixation of fractures of the humerus, elbow, and forearm.</td>
</tr>
</tbody>
</table>
- Demonstrate competence with closing surgical wounds
- Describe the appropriate technique and demonstrate the ability to inject shoulders, elbows, and wrists in a safe and reliable fashion.
- Develop the ability to work under loop magnification and operating microscope.
- Recognize and initiate appropriate evaluation and referral for common post-operative complications, such as pulmonary emboli and myocardial infarctions

**Measurement:** Faculty rotation evaluation, direct observation

**Core Competency: Medical Knowledge:**

**Goals:**
- Know basic upper extremity anatomy
- Know common upper extremity surgical approaches
- Know the pathophysiology, presentation, evaluation, and treatment options for common upper extremity conditions.

*Junior level resident will demonstrate competency in the following objectives*

**Objectives:**
- Demonstrate progressive improvement in basic upper extremity anatomy knowledge
- Demonstrate knowledge of the peripheral nerves in the upper extremity
- Demonstrate knowledge of standard surgical approaches to the arm, forearm, and hand
- Demonstrate knowledge of common upper extremity conditions
- Demonstrate knowledge of indications and contraindications for common surgical procedures performed
- Demonstrate the ability to recognize and develop a treatment plan for musculoskeletal infections of the upper extremity.

**Measurement:** Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.

**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Know how to critically evaluate the effectiveness of the non-operative and operative management of patients with upper extremity conditions.

*Junior level resident will demonstrate beginning competency in the following objectives*

**Objective:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to clinical cases.

**Measurement:** Faculty rotation evaluation, direct observation
**Goals:**  
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients.  
- Know how to interact in an effective manner with patients and their families.

*Junior level resident will demonstrate beginning competency in the following objectives*

**Objectives:**  
- Interacts in an effective manner with all personnel in the out-patients and hospital environments involved in the care of patients.  
- Demonstrate effective and appropriate communication skills with patients and their families.  
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluation

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**Core Competency Professionalism**

**Goal:**  
- Know how to act in a professional and ethical fashion.

*Junior level resident will demonstrate beginning competency in the following objectives*

**Objective:**  
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluation

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**Core Competency Systems-based Practice**

**Goals:**  
- Know how to utilize available resources to maximize the care of patients.  
- Know the impact of disability related to upper extremity conditions.

*Junior level resident will demonstrate beginning competency in the following objectives.*

**Objectives:**  
- Utilize available resources to maximize the quality of care of patients.  
- Describe the disability associated with upper extremity conditions.

**Measurement:** Faculty rotation evaluation

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**SENIOR LEVEL RESIDENTS**

**Core Competency: Patient Care**

**Goals:**  
- Know how to complete patient history and physical exam with appropriate provocative tests for
patients with common upper extremity problems.

- Become competent in performing injections for trigger digits and carpal tunnel syndrome
- Know how to interpret arthrograms and MRIs
- Become competent in performing standard upper extremity procedures

**Senior level residents will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of junior level residents:**

**Objectives:**

- Demonstrate ability to complete patient history and physical exam
- Demonstrate ability to perform specific provocative tests for common upper extremity problems including but not limited to (carpal tunnel syndrome and cubital tunnel syndrome)
- Demonstrate competency in performing injections for trigger digits, as well as carpal tunnel syndrome.
- Demonstrate the ability to interpret arthrograms and MRIs of the shoulder and wrist.
- Demonstrate competency in performing standard shoulder procedures, such as arthroscopy, rotator cuff repairs, and procedures for impingement.
- Demonstrate competency in performing standard hand and upper extremity procedures, such as carpal tunnel release, trigger digit releases, utilizing atraumatic technique and under magnification.
- Demonstrate competency in performing local and pedicle flap procedures
- Demonstrate competency in performing open reduction and internal fixation of phalangeal, metacarpal, carpal, and wrist fractures
- Demonstrate competence in performing upper extremity arthroscopic and endoscopic procedures
- Demonstrate the ability to expose and handle peripheral nerves in an atraumatic fashion
- Demonstrate competency in approaching bones in the upper extremity in a safe fashion utilizing internervous plains or after exposing and mobilizing peripheral nerves
- Demonstrate advancing microsurgical skills

**Measurement:** Faculty rotation evaluation, direct observation
Core Competency: Medical Knowledge:

Goals:
- Know the pathophysiology, evaluation, and treatment options and complications for common upper extremity conditions.
- Know wrist and hand biomechanics.
- Know upper extremity vascular and nerve anatomy
- Know soft tissue coverage techniques.

Senior level residents will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of the junior level residents:

Objectives:
- Demonstrate knowledge of wrist biomechanics, as well as intrinsic function and malfunction in the hand
- Demonstrate the ability to diagnose common upper extremity conditions and formulate a treatment plan
- Continuously refine abilities to diagnose more complicated conditions, such as chronic wrist pain
- Demonstrate a detailed knowledge of the vascular and nerve anatomy of the upper extremities
- Demonstrate a working knowledge of soft tissue coverage techniques for trauma patients
- Demonstrate a thorough understanding of success rates and complications with upper extremity procedures.

Measurement: Faculty rotation evaluation, direct observation, Orthopaedic In-Training Examination.

Core Competency Practice-Based Learning and Improvement

Goals:
- Knows how to critically evaluate the effectiveness of the non-operative and operative management of patients with upper extremity conditions.
- Know how to discuss evidence-based medicine as applied to clinical cases.

Senior level residents will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of junior level residents:

Objectives:
- Critically evaluates the effectiveness of the management of patients with upper extremity conditions.
- Discuss evidence-based medicine as applied to clinical cases.

Measurement: Faculty rotation evaluation, Direct observation
### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients with upper extremity conditions.
- Know how to interact in an effective manner with patients and their families.

*Senior level residents will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of junior level residents:*

**Objectives:**
- Interact in an effective manner with all personnel in the hospital environment involved in the perioperative care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families. Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluation

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*Senior level residents will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of junior level residents:*

**Objectives:**
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning
  - *Participate in teaching of junior level residents.*

**Measurement:** Faculty rotation evaluation, 360 evaluation
Core Competency Systems-based Practice

Goals:
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to upper extremity conditions.

Senior level residents will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of junior level residents:

Objective:
- Utilize available resources to maximize the quality of patient care.
- Assist patients in dealing with system complexities.
- Demonstrate knowledge of different types of re-imbursement systems, including workers’ compensation, Medicaid, and Medicare.
- Describe disability related to upper extremity conditions, especially the ability to work and the impact on the patient, family, and society.

Measurement: Faculty rotation evaluation, Direct observation

References

3. Hoppenfeld S, and deBoer P: Surgical Exposures in Orthopaedics
5. Hand Surgery Update
6. Journal of Hand Surgery
MUSCULOSKELETAL ONCOLOGY

The musculoskeletal oncology rotation is 3 months in length. Residents are exposed to the continuum of care of patients with bone or soft tissue tumors or metabolic bone disease. Residents participate in patient care and are evaluated in the out-patient, in-patient, and operating room settings. Residents are under consistent faculty supervision. Depending on scheduling and training need, residents may be assigned this rotation at different times during their training and are typically teamed with a more senior resident on the Spine service. Therefore it is level of progression is delineated by Junior Level and by Senior Level.

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

JUNIOR LEVEL RESIDENTS

Core Competency: Patient Care

Goals:
- Know how to complete a patient history and physical exam.
- Know the role and interpretation of imaging and laboratory studies
- Know appropriate techniques for biopsy
- Know appropriate techniques for curettage and grafting.

*Junior level residents will demonstrate competency in the following objectives*

Objectives:
- Demonstrate proficiency at clinical examination.
- Demonstrate ability to completed a problem-based history and perform a detailed examination.
- Demonstrate knowledge of the radiographic and/or laboratory investigation of a patient with a bone or soft tissue tumor.
- Demonstrate the ability to evaluate plain films, computed tomography, and MRI to identify latent versus aggressive lesions.
- Demonstrate competency with techniques for biopsy, curettage, and grafting.

Measurement: Faculty rotation evaluation, Direct observation

Core Competency: Medical Knowledge:

Goals:
- Know the presentation of common benign and malignant lesions.
- Know the indications and approaches for biopsy.
- Know the treatment indications and options for benign, primary malignant, and metastatic lesions.
- Know the natural history and effectiveness of treatment options for bone and soft tissue tumors.
- Know the Enneking staging system for tumors.
Junior level will demonstrate competency in the following objectives

Objectives:
- Describe clinical and radiographic presentations of common benign, malignant, and malignant lesions, as well as those conditions mimicking neoplasia.
- Describe the evaluation of benign, primary malignant, and metastatic lesions.
- Be able to discuss treatment indications and alternatives for benign, primary malignant, and metastatic lesions.
- Describe the natural history and expected treatment outcome for patients with bone and soft tissue tumors.
- Describe the Enneking staging system.

Measurement: Faculty rotation evaluation, direct observation, Orthopaedic In-Training Examination.

Core Competency Practice-Based Learning and Improvement

Goal:
- Knows how to critically evaluate the effectiveness of the management of oncology patients.

Junior level residents will demonstrate beginning competency in the following objectives

Objective:
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to clinical cases.

Measurement: Faculty rotation evaluation

Core Competency Interpersonal and Communication Skills

Goals:
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients.
- Know how to interact in an effective manner with patients and their families, understanding the challenges of patients dealing with potentially life-altering or life-threatening conditions.
- Know the impact of age, culture, and socioeconomic status on difficult patient-physician discussions.

Junior level residents will demonstrate beginning competency in the following objectives

Objectives:
- Interacts in an effective manner with all personnel in the hospital environment involved in the care of oncology patients.
- Demonstrates effective, appropriate, and sensitive communication skills with oncology patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

Measurement: Faculty rotation evaluation, 360 evaluation
### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.  

_Junior level residents will demonstrate beginning competency in the following objectives_

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluation

### Core Competency Systems-based Practice

**Goals:**
- Knows how to utilize available resources to maximize the care of oncology patients.
- Knows the impact of bone and soft tissue tumors on the ability to return to school, work, and family roles.
- Know the roles of other health care professionals (e.g., palliative care).
- Know the impact of disability related to musculoskeletal oncology.

_Junior level residents will demonstrate beginning competency in the following objectives_

**Objectives:**
- Develop progressive knowledge of the hospice and palliative care systems.
- Utilize available resources to maximize the quality of care of patients.
- Discuss the personal and societal impact of bone and soft tissue tumors.

**Measurement:** Faculty rotation evaluation, Direct observation

### SENIOR LEVEL RESIDENTS

**Core Competency: Patient Care**

**Goals:**
- Know the continuum of care for patients with bone or soft tissue tumors.
- Know techniques for tumor resection and reconstruction.

_In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives_

**Objectives:**
- Demonstrate appropriate evaluation and surgical technique in management of pathologic fractures.
- Describe reconstruction options after tumor resection and demonstrate familiarity with surgical techniques.
- Demonstrate technical competency in biopsy of tumors, resection of tumors, reconstruction of
- bones and/or joints following tumor resections

**Measurement:** Faculty rotation evaluation, Direct observation

### Core Competency: Medical Knowledge:

**Goals:**
- Know the treatment paradigms for patients with suspected or confirmed bone or soft tissue tumors.
- Know the indications for surgery and surgical options for patients with bone or soft tissue tumors.
- Know the long-term outcome of treatment of bone or soft tissue tumors.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
- Describe indications for:
  - Incisional versus excision biopsy
  - Limb salvage versus amputation
  - Prophylactic long bone fixation
- Demonstrate knowledge of the natural history of the various conditions and the effectiveness of treatment options.
- Demonstrate knowledge of various options for reconstruction after tumor resection.
- Describe the evaluation of patients with suspected bone and soft tissue tumors.

**Measurement:** Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.

### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the management of patients with bone and soft tissue tumors.

*Senior level residents will demonstrate continued competency in the following objectives*
**Objective:**
- Demonstrate ability to search literature and apply evidence based medicine to personal practice and patient care.

**Measurement:** Faculty rotation evaluation

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### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in the out-patient and hospital environments patient care.
- Know how to interact in an effective manner with patients and their families.
- Understand the multidisciplinary and multi-professional nature of oncology care.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families, understanding the impact of developmental level and culture on difficult patient-physician discussions.

**Measurement:** Faculty rotation evaluation, 360 evaluation

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### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluation, direct observation
### Core Competency Systems-based Practice

**Goals:**
- Knows how to utilize available resources to maximize the care of patients.
- Knows the impact of disability related to neoplastic conditions.
- Know the role of hospice and palliative care systems.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Demonstrate knowledge and understanding of the hospice and palliative care systems.
- Describe the impact of life-altering and life-threatening conditions on the ability of the patient to return to school, work, and other societal roles.
- Utilize available resources to maximize the quality of patient care.

**Measurement:** Faculty rotation evaluation, Direct observation

### References

Orthopaedic residents will spend a total of 6 months on the pediatric orthopaedic rotation during their 5 year training program: 2 separate 3-month rotations, both completed during the junior level of training. It is anticipated that during their second rotation, residents will build upon competencies developed during their first rotation. The rotation will occur at the Children’s’ Mercy Hospital in Kansas City, Missouri. Residents from the University of Kansas will participate in this rotation with orthopaedic residents from the University of Missouri-Kansas City, as well as interacting with other health care professionals. Residents will participate and be evaluated in the out-patient, in-patient, and operating room settings. Residents will be under direct supervision of faculty. Residents on the pediatric rotation are expected to read the assigned material. The residents are also expected to participate in the weekly x-ray review conference and the weekly spine deformity conference. Residents will also participate in the pediatric orthopaedic journal club that occurs every 4-6 weeks.

Depending on scheduling and training need, residents may be assigned this rotation at different times during their training. However, it is anticipated that this will occur during the PGY-2 and PGY3 years.

### PGY-2 LEVEL RESIDENTS

**Core Competency: Patient Care**

**Goals:**
- Know how to complete a pediatric patient history and physical exam.
- Know the impact of developmental stage and the role of parents during history-taking.

*PGY-2 level residents will demonstrate beginning competencies in the following objectives*

**Objectives:**
- Demonstrate competence in clinical examination
- Demonstrate ability to completed a problem-based history and perform a detailed examination with input from patient and family members/guardians.

**Measurement:** Faculty rotation evaluations
Goals:
- Know how to evaluate pediatric patients with common musculoskeletal complaints
- Know the differential diagnosis and potential treatment plans for common orthopaedic conditions in pediatric patients.

*PGY-2 level residents will demonstrate beginning competencies in the following objectives*

Objectives:
- Demonstrate the ability to evaluate and describe potential treatment plans for common pediatric orthopaedic conditions, including but not be limited to the following:
  - Foot deformities in the newborn
  - The limping child in the one year, 6 year, and 12 year age groups
  - Developmental hip dysplasia in the child less than one year, including the use of and indications for the Pavlik harness
  - Slipped capital femoral epiphysis and Perthes disease of the hip
  - Rotational and angular deformities in the lower extremities of the child including genu varus and valgus, intoeing, and out-toeing, including identifying normal variation
  - Pediatric osteochondrosis, Osgood-Schlatter’s and Severs disease
  - Possible child abuse
  - Neuromuscular diseases in the child including cerebral palsy, muscular dystrophy, spina bifida cystica, and peripheral neuropathy such as Charcot Marie Tooth disease
  - More common bone dysplasias such as multiple hereditary exostosis, polyostotic fibrous dysplasia, osteogenesis imperfecta, multiple epiphyseal dysplasias, and multiple metaphyseal dysplasia
  - Musculoskeletal infections in the child including osteomyelitis and septic arthritis
  - Leg length discrepancy, including the various treatment options such as epiphysiodesis, shortening, and limb lengthening
  - Pathologic angular deformities in the lower extremities such as posterior medial and anterior lateral bowing of the tibia and Blount’s disease of the knee
  - Cavus foot deformities and flat foot deformities in the child
  - Pediatric sports injuries, especially compared to adult sports medicine
  - Pediatric spinal deformity

Measurement: Faculty rotation evaluations
GOAL:
- Be able to describe treatment options and techniques for common pediatric musculoskeletal conditions.

PGY-2 level residents will demonstrate beginning competencies in the following objectives.

Objectives:
- Describe the various treatment options for limb length discrepancy, such as epiphysiodesis, limb shortening, and limb lengthening.
- Describe the treatment options and techniques used to treat upper extremity injuries including the operative treatment of common elbow fractures including supracondylar fractures, lateral condyle fractures, medial epicondyle fractures.
- Demonstrate familiarity with the closed reduction of forearm fractures and indications for possible operative treatment.
- Describe treatment options and techniques used to treat lower extremity injuries including the treatment of pediatric femur fractures in all age groups including spica cast, external fixators, flexible intramedullary nails, and trochanteric entry nails.
- Describe treatment indications and options used for the treatment of growth plate injuries in the upper and lower extremity, including the need for surgical treatment
  - proximal tibial epiphyseal injuries and distal femoral epiphyseal injuries
  - upper extremity injuries to the distal humeral growth plate and proximal humeral growth plate
- Demonstrate familiarity with the techniques of:
  - fasciotomies of the upper and lower extremities
  - pinning of proximal humerus fractures
  - closed reduction and pinning of a supracondylar fracture of the humerus
  - open reduction and pinning of a lateral condyle fracture
  - flexible nailing of a forearm fracture
  - open or closed reduction of pediatric hip fractures with fixation
  - spica cast for a femur fracture
  - flexible nail, trochanteric enter nail, and external fixation treatment of pediatric femur fractures.
  - pinning of supracondylar fracture of epiphyseal separation of the distal femur
  - operative treatment of pediatric ankle fractures (triplane, Tillaux, bimalleolar, and medial malleolar fractures)

Measurement: Faculty rotation evaluation; direct observation in the clinic, inpatient wards, and operating room.
### Core Competency: Medical Knowledge:

**Goal:**
- Know the indications for, surgical techniques of, and potential complications of surgical treatment for non-traumatic pediatric musculoskeletal disorders.

**PGY-2 level residents will demonstrate beginning competencies in the following objectives**

<table>
<thead>
<tr>
<th>Objectives</th>
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</thead>
<tbody>
<tr>
<td>Demonstrate knowledge of the indications for and potential complications associated with surgical treatment for non-traumatic pediatric musculoskeletal disorders, including but not be limited to the following:</td>
</tr>
<tr>
<td>o Tendon lengthenings of the foot and ankle.</td>
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<tr>
<td>o Tendon transfers of the foot and ankle including anterior tibial tendon transfers, posterior tendon transfers, and split anterior tibial tendon transfers.</td>
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<tr>
<td>o Pinning of slipped capital femoral epiphysis (both stable and unstable slips).</td>
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<td>o Hamstring and adductor releases.</td>
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<td>o Epiphysiodesis including hemiepiphysiodesis with hardware.</td>
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<td>o Corrective osteotomies of the femur and tibia for deformities of the lower extremity</td>
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<tr>
<td>o Surgical treatment of Perthes disease including the indications and various treatment options (femoral vs. pelvic osteotomy).</td>
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<td>o Treatment of septic arthritis and osteomyelitis.</td>
</tr>
<tr>
<td>o Treatment of developmental hip dysplasia including the roles of closed reduction, arthrogram, open reduction, and open reduction combined with femoral and pelvic osteotomies.</td>
</tr>
<tr>
<td>o Treatment of pediatric spinal deformities (both anterior and posterior approaches), including both idiopathic scoliosis and neuromuscular conditions.</td>
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</tbody>
</table>

**Measurement:** Faculty rotation evaluations, Orthopaedic In-Training Examination

**Goal:**
- Know the indications and treatment alternatives for pediatric musculoskeletal trauma.

**PGY-2 level residents will demonstrate beginning competencies in the following objectives**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Demonstrate knowledge of the treatment of upper extremity injuries including the operative treatment of common elbow fractures including supracondylar fractures, lateral condyle fractures, medial epicondyle fractures.</td>
</tr>
<tr>
<td>Demonstrate familiarity with the technique closed reduction of forearm fractures and indications for possible operative treatment.</td>
</tr>
<tr>
<td>Demonstrate knowledge of the treatment of lower extremity injuries including the treatment of pediatric femur fractures in all age groups including spica cast, external fixators, flexible intramedullary nails, and trochanteric entry nails.</td>
</tr>
<tr>
<td>Demonstrate familiarity with treatment of growth plate injuries in the upper and lower</td>
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</tbody>
</table>
extremity including the need for surgical treatment for:
  o proximal tibial epiphyseal injuries and distal femoral epiphyseal injuries
  o upper extremity injuries to the distal femoral growth plate and proximal humeral growth plate.

**Measurement:** Faculty rotation evaluation Direct observation, Orthopaedic In-Training Examination.

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**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Know how to critically evaluate the effectiveness of the management of pediatric patients with musculoskeletal conditions.

*PGY-2 level residents will demonstrate beginning competencies in the following objectives*

**Objective:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to pediatric clinical cases.

**Measurement:** Faculty rotation evaluations, conference participation

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**Core Competency Interpersonal and Communication Skills**

**Goal:**
- Know how to interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of pediatric patients.
- Know how to interact in an effective manner with pediatric patients and their families.

*PGY-2 level residents will demonstrate beginning competencies in the following objectives*

**Objective**
- Interact in an effective manner with all personnel in the hospital environment involved in the care of pediatric patients.
- Demonstrate effective and appropriate communication skills with pediatric patients and their families.
- Demonstrate knowledge of the impact of development stage on patient-physician interactions.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, pediatric patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluations
### Core Competency: Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*PGY-2 level residents will demonstrate beginning competencies in the following objectives*

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluations

### Core Competency: Systems-based Practice

**Goals:**
- Know how to utilize available resources to maximize the care of pediatric patients.
- Know the impact of short- and long-term disability related to pediatric traumatic and non-traumatic conditions.

*PGY-2 level residents will demonstrate beginning competencies in the following objectives*

**Objectives**
- Utilize available resources to maximize the quality of patient care.

**Measurement:** Faculty rotation evaluation, direct observation

### PGY-3 LEVEL RESIDENTS

**Core Competency: Patient Care**

**Goals:**
- Know how to complete a pediatric patient history and physical exam.
- Know the impact of developmental stage and the role of parents during history-taking.

*PGY-3 level residents will demonstrate competencies in the following objectives*

**Objectives:**
- Demonstrate competence in clinical examination
- Demonstrate ability to completed a problem-based history and perform a detailed examination with input from patient and family members/guardians.

**Measurement:** Faculty rotation evaluations
Goals:
- Know how to evaluate pediatric patients with common musculoskeletal complaints
- Know the differential diagnosis and potential treatment plans for common orthopaedic conditions in pediatric patients.

PGY-3 level residents will demonstrate competencies in the following objectives

Objectives:
- Demonstrate the ability to evaluate and develop potential treatment plans for common pediatric orthopaedic conditions, including but not be limited to the following:
  - Foot deformities in the newborn
  - The limping child in the one year, 6 year, and 12 year age groups
  - Developmental hip dysplasia in the child less than one year, including the use of and indications for the Pavlik harness.
  - Slipped capital femoral epiphysis and Perthes disease of the hip.
  - Rotational and angular deformities in the lower extremities of the child including genu varus and valgus, intoeing, and out-toeing, including identifying normal variation
  - Pediatric osteochondrosis, Osgood-Schlatter’s and Severs disease.
  - Possible child abuse.
  - Neuromuscular diseases in the child including cerebral palsy, muscular dystrophy, spina bifida cystica, and peripheral neuropathy such as Charcot Marie Tooth disease.
  - More common bone dysplasias such as multiple hereditary exostosis, polyostotic fibrous dysplasia, osteogenesis imperfecta, multiple epiphyseal dysplasias, and multiple metaphyseal dysplasia.
  - Musculoskeletal infections in the child including osteomyelitis and septic arthritis.
  - Leg length discrepancy, including the various treatment options such as epiphysiodesis, shortening, and limb lengthening.
  - Pathologic angular deformities in the lower extremities such as posterior medial and anterior lateral bowing of the tibia and Blount’s disease of the knee.
  - Cavus foot deformities and flat foot deformities in the child.
  - Pediatric sports injuries, especially compared to adult sports medicine.
  - Pediatric spinal deformity

Measurement: Faculty rotation evaluations

Goal:
- Be able to describe treatment options and techniques for common pediatric musculoskeletal conditions.

PGY-3 level residents will demonstrate competencies in the following objectives.
### Objectives:
- Describe the various treatment options for limb length discrepancy, such as epiphysiodesis, limb shortening, and limb lengthening.
- Demonstrate the ability to treat upper extremity injuries including the operative treatment of common elbow fractures including supracondylar fractures, lateral condyle fractures, medial epicondyle fractures.
- Demonstrate familiarity with the closed reduction of forearm fractures and indications for possible operative treatment.
- Demonstrate the ability to treat lower extremity injuries including the treatment of pediatric femur fractures in all age groups including spica cast, external fixators, flexible intramedullary nails, and trochanteric entry nails.
- Describe treatment indications and options used for the treatment of growth plate injuries in the upper and lower extremity, including the need for surgical treatment.
  - proximal tibial epiphyseal injuries and distal femoral epiphyseal injuries
  - upper extremity injuries to the distal humeral growth plate and proximal humeral growth plate
- Demonstrate knowledge of indications and techniques for:
  - fasciotomies of the upper and lower extremities
  - pinning of proximal humerus fractures
  - closed reduction and pinning of a supracondylar fracture of the humerus
  - open reduction and pinning of a lateral condyle fracture
  - flexible nailing of a forearm fracture
  - open or closed reduction of pediatric hip fractures with fixation
  - spica cast for a femur fracture
  - flexible nail, trochanteric enter nail, and external fixation treatment of pediatric femur fractures.
  - pinning of supracondylar fracture of epiphyseal separation of the distal femur
  - operative treatment of pediatric ankle fractures (triplane, Tillaux, bimalleolar, and medial malleolar fractures)

### Measurement:
Faculty rotation evaluation; direct observation in the clinic, inpatient wards, and operating room.

### Core Competency: Medical Knowledge:

#### Goal:
- Know the indications for, surgical techniques of, and potential complications of surgical treatment for non-traumatic pediatric musculoskeletal disorders.

PGY-3 *level residents will demonstrate competencies in the following objectives*

#### Objectives:
- Demonstrate knowledge of the indications for, surgical treatment of, and potential complications associated with surgical treatment for non-traumatic pediatric musculoskeletal disorders, including but not be limited to the following:
  - Tendon lengthenings of the foot and ankle.
  - Tendon transfers of the foot and ankle including anterior tibial tendon transfers, posterior tendon transfers, and split anterior tibial tendon transfers.
- Pinning of slipped capital femoral epiphysis (both stable and unstable slips).
- Hamstring and adductor releases.
- Epiphysiodesis including hemiepiphysiodesis with hardware.
- Corrective osteotomies of the femur and tibia for deformities of the lower extremity
- Surgical treatment of Perthes disease including the indications and various treatment options (femoral vs. pelvic osteotomy).
- Treatment of septic arthritis and osteomyelitis.
- Treatment of developmental hip dysplasia including the roles of closed reduction, arthrogram, open reduction, and open reduction combined with femoral and pelvic osteotomies.
- Treatment of pediatric spinal deformities (both anterior and posterior approaches), including both idiopathic scoliosis and neuromuscular conditions.

**Measurement:** Faculty rotation evaluations, Orthopaedic In-Training Examination

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**Goal:**
- Know the treatment indications and alternatives and long-term outcomes for pediatric musculoskeletal trauma.

**PGY-3 level residents will demonstrate competencies in the following objectives**

**Objectives:**
- Demonstrate knowledge of the treatment of upper extremity injuries including the operative treatment of common elbow fractures including supracondylar fractures, lateral condyle fractures, medial epicondyle fractures.
- Demonstrate familiarity with the technique closed reduction of forearm fractures and indications for possible operative treatment.
- Demonstrate knowledge of the treatment of lower extremity injuries including the treatment of pediatric femur fractures in all age groups including spica cast, external fixators, flexible intramedullary nails, and trochanteric entry nails.
- Demonstrate familiarity with treatment of growth plate injuries in the upper and lower extremity including the need for surgical treatment for:
  - proximal tibial epiphyseal injuries and distal femoral epiphyseal injuries
  - upper extremity injuries to the distal femoral growth plate and proximal humeral growth plate.

**Measurement:** Faculty rotation evaluation Direct observation, Orthopaedic In-Training Examination
### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the management of pediatric patients with musculoskeletal conditions.

**PGY-3 level residents will demonstrate competencies in the following objectives**

**Objective:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to pediatric clinical cases.

**Measurement:** Faculty rotation evaluations, conference participation

### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of pediatric patients.
- Know how to interact in an effective manner with pediatric patients and their families.

**PGY-3 level residents will demonstrate competencies in the following objectives**

**Objectives:**
- Interact in an effective manner with all personnel in the hospital environment involved in the care of pediatric patients.
- Demonstrate effective and appropriate communication skills with pediatric patients and their families.
- Demonstrate knowledge of the impact of development stage on patient-physician interactions.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, pediatric patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluations

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

**PGY-3 level residents will demonstrate competencies in the following objectives**

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluations
<table>
<thead>
<tr>
<th>Core Competency Systems-based Practice</th>
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<tbody>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>• Know how to utilize available resources to maximize the care of pediatric patients.</td>
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<tr>
<td>• Know the impact of short- and long-term disability related to pediatric traumatic and non-traumatic conditions.</td>
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</table>

**PGY-3 level residents will demonstrate competencies in the following objectives**

<table>
<thead>
<tr>
<th>Objectives:</th>
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</thead>
<tbody>
<tr>
<td>• Demonstrate knowledge of the short- and long-term impact of pediatric musculoskeletal conditions, including effects on education, recreational activities, and future employment.</td>
</tr>
<tr>
<td>• Utilize available resources to maximize the quality of patient care.</td>
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</tbody>
</table>

**Measurement:** Faculty rotation evaluation, direct observation
RESEARCH

The research rotation is a three-month block during the PGY-3 year. Only one resident is on this rotation at any given time. The resident research experience, however, is ongoing, spanning several years, beginning with planning and preparation prior to the research rotation. Residents pursue research projects that are original ideas with faculty support, projects generated by clinical or research faculty, or continuation of ongoing projects. Residents are expected to complete this initial planning by the end of the PGY-2 year. The project is expected to be completed and an initial draft of a research article written by the end of the rotation. Research can consist of clinical or laboratory investigations.

The Research Committee meets on a Thursday each month. Each resident will meet with the Research Committee twice before the beginning of their rotation: once approximately 4 months prior and once approximately 2 months prior to the start of the rotation. At these meetings, the resident is expected to provide information and formal proposals on the project(s) that he/she plans to undertake. This will provide sufficient time for the appropriate Institutional Review Board (IRB) or Institutional Animal Care and Use Committee (IACUC) approval and ordering of materials. Proposals are to be approved by the Research Committee prior to submission to the IRB or IACUC. Research is conducted under the supervision of the Research Director, with monthly progress tracked by the Research Committee.

During the research rotation, residents are released from routine clinical duties. However, they are expected to take call and assist in the operating room in the cases of special need. While fulfilling these clinical responsibilities, residents will be evaluated in the 6 core competencies. The specific goals and objectives of their evaluations will those of the service to which they are assigned.

<table>
<thead>
<tr>
<th>PGY 3 RESIDENTS</th>
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<tbody>
<tr>
<td><strong>Core Competency: Medical Knowledge:</strong></td>
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<tr>
<td><strong>Goal:</strong></td>
<td></td>
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<tr>
<td>• Progressive fund of knowledge in orthopaedic procedures and practices.</td>
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<tr>
<td><strong>Objective:</strong></td>
<td></td>
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<tr>
<td>• Continue to develop fund of knowledge in orthopaedics to identify ideas to apply to a research project</td>
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<tr>
<td><strong>Measurement:</strong> Faculty rotation evaluation, Orthopaedic In-Training Examination</td>
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<thead>
<tr>
<th>Core Competency Practice-Based Learning and Improvement</th>
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<tbody>
<tr>
<td><strong>Goal:</strong></td>
<td></td>
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<tr>
<td>• Know the process of carrying out an IRB or IACUC research project from conception to dissemination.</td>
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<tr>
<td><strong>Objectives:</strong></td>
<td></td>
</tr>
<tr>
<td>Demonstrate the steps and methods associated with good research practice</td>
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</tbody>
</table>
- Formulate a research question
- Investigate the current literature and summarizing the background of the topic
- Plan and write a research proposal
- Formulate a working hypothesis based on the research question
- Write a detailed protocol
- Implement the plan to collect the appropriate data
- Keep a detailed lab notebook
- Perform necessary analyses with statistical support
- Write descriptive summaries and making inferences based on findings

**Measurement:** Faculty rotation evaluation, direct observation, project completion

### Core Competency Interpersonal and Communication Skills

**Goal:**
- Know how to interact in an effective manner

**Objectives:**
- Interact effectively and appropriately with Research committee and with IRB or IACUC.
- Demonstrate ability to present ideas and communicate research findings effectively, both in written and oral formats.

**Measurement:** Faculty rotation evaluation, direct observation

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

**Objective**
- Demonstrate attention to administrative duties, including:
  - Coordination of weekly x-ray/indication conference
  - Coordination of monthly M&M conferences, including maintaining the data base and selecting representative radiographs
  - Assigning articles for monthly JBJS and specialty journal clubs
  - Providing monthly junior resident call schedules.
- Understand and adhere to all IRB training and guidelines for human subjects or animal research.
- Complete key goals of the research project by previously assigned deadlines.
- Completion of the research project by the end of the rotation.
- Demonstrate commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluation, direct observation
SPINE

The spine rotation is 3 months in length. Residents will be assigned to and evaluated in out-patient and in-patient clinical settings. Residents will be under direct faculty supervision. Residents will participate in patient care in a multi-professional environment. Residents on the spine service will work with more junior residents on the oncology service.

Depending on scheduling and training need, residents may be assigned this rotation at different times during their training. Therefore it is level of progression is delineated by Junior Level and by Senior Level.

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

JUNIOR LEVEL RESIDENTS

Core Competency: Patient Care

Goal:
- Become proficient in complete spinal and neurologic examinations.
- Know the diagnosis, evaluation, and treatment of common types of spinal deformities.

*Junior level residents will demonstrate beginning competency in the following objectives*

Objectives:
- Demonstrate proficiency in complete spinal and neurologic examinations
- Participate in operative planning.
- Demonstrate knowledge of the diagnoses, evaluation, and treatment of common spinal deformities, including but is not limited to the following:
  - Idiopathic
  - Neuropathic
  - Myopathic
  - Congenital
  - Neurofibromatosis
  - Traumatic
  - Osteochondrodystrophies
  - Scheuermann’s
  - Infection
  - Neoplastic
  - Inflammatory
  - Metabolic
  - Spondylolysis
  - Spondylolisthesis
  - Syndromes
  - Functional

Measurement: Faculty rotation evaluation, Direct observation

Core Competency: Medical Knowledge:
Goals:
- Know spinal anatomy, especially in terms of surgical approaches.
- Know the pathogenesis of common spinal deformities.
- Know the indications for common spinal procedures.

*Junior level will demonstrate competency in the following objectives*

Objectives:
- Demonstrate a complete spinal and neurologic examination.
- Discuss the pathogenesis of common spinal deformities, including:
  - Idiopathic
  - Neuropathic
  - Myopathic
  - Congenital
  - Neurofibromatosis
  - Traumatic
  - Osteochondrodystrophies
  - Scheuermann’s
  - Infection
  - Neoplastic
  - Inflammatory
  - Metabolic
  - Spondylyosis
  - Spondylolisthesis
  - Syndromes
  - Functional
- Discuss normal and abnormal spinal alignment in three dimensions, as well as normal spinal anatomy.
- Discuss indications and contraindications for surgery based on deformity etiology, locations, magnitude, and known natural history.
- Demonstrate knowledge of direct and indirect decompression, realignment, and stabilization, including arthrodesis, instrumentation, and other modalities (i.e., cast, brace, and halo).
- Demonstrate knowledge of anterior and posterior surgical approaches to the thoracolumbar spine.

Measurement: Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination
### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the management of patients with spinal disorders.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objective:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to clinical cases.

*Measurement:* Faculty rotation evaluations, conference participation

### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients.
- Know how to interact in an effective manner with patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients with spinal disorders.
- Demonstrate effective and appropriate communication skills with patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

*Measurement:* Faculty rotation evaluation, 360 evaluation

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

*Measurement:* Faculty rotation evaluation, 360 evaluation

### Core Competency Systems-based Practice
**Goals:**

- Know how to utilize available resources to maximize the care of spine patients.
- Know the impact of disability related to conditions of the spine.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objectives:**

- Understand how spinal conditions and their treatment affect the health care organization and society at-large.
- Understand the impact of disability related to disorders of the spine.
- Utilize available resources to maximize the quality of care of patients.

**Measurement:** Faculty rotation evaluation, Direct observation

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**SENIOR LEVEL RESIDENTS**

**Core Competency: Patient Care**

**Goals:**

- Be proficient at spinal and neurologic examinations.
- Know the indications for obtaining specific diagnostic tests.
- Know how to interpret specific diagnostic tests.
- Become proficient in specific spinal procedures.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**

- Demonstrate proficiency in spinal and neurologic examinations.
- Discuss the indications for and demonstrate proficiency in interpreting specific diagnostic tests, including but not limited to the following:
  - Laboratory
  - Radiographs
  - Nuclear medicine studies
  - Myelograms
  - Computed tomography
  - Magnetic resonance imaging
  - EMG/NCVs
  - SCEPs
- Demonstrate competency in anterior and posterior approaches to the cervical, thoracic, and lumbosacral spine
- Demonstrate competency in stabilization (including posterior, posterolateral, and interbody arthrodesis-bone graft harvesting and fusion techniques)
- Demonstrate skills in the following Instrumentation:
  - Wiring and cable-interspinous, facet, and sublaminar
  - Hooks
  - Bone screw-rod and plate systems
  - Anterior and posterior plating
- Demonstrated skills in the following procedures:
- Halo
- Casts
- Brace

- Demonstrate competency in complex post-operative management, including prevention, recognition, and treatment of complications.

**Measurement:** Faculty rotation evaluation, Direct observation

**Core Competency: Medical Knowledge:**

**Goal:**
- Know the diagnosis, pathogenesis, evaluation, and treatment of pediatric and adult spinal disorders.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
- Discuss the diagnosis, pathogenesis, evaluation, and treatment of adult spinal disorders, including the following:
  - Degenerative
  - Traumatic
  - Deformity
  - Inflammatory
  - Metabolic
  - Infectious
  - Neoplastic

**Measurement:** Faculty rotation evaluations, Orthopaedic In-Training Exam

**Goal:**
- Knowledge the indications and contraindications for operative and non-operative management of spinal conditions.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*
Objectives:
- Demonstrate the ability to discuss indications and contraindications for trauma surgery based on location, classification, magnitude, timing, associated injuries, and neurologic deficits.
- Demonstrate the ability to discuss indications and contraindications for degenerative spine surgery based on etiology, level(s), instability, neurologic deficit, and natural history.

Measurement: Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.

Core Competency Practice-Based Learning and Improvement

Goal:
- Know how to critically evaluate the effectiveness of the patients with spinal disorders.

Senior level residents will demonstrate continued competency in the following objectives

Objective:
- Demonstrate ability to search literature and apply evidence based medicine to personal practice and patient care.

Measurement: Faculty rotation evaluation, direct observation, indications and morbidity/mortality conferences

Core Competency Interpersonal and Communication Skills

Goals:
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients.
- Know how to interact in an effective manner with patients and their families.

Senior level residents will demonstrate continued competency in the following objectives

Objectives:
- Interact in an effective manner with all personnel in the hospital environment involved in the perioperative care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

Measurement: Faculty rotation evaluation, 360 evaluation
Core Competency Professionalism

Goal:
- Know how to act in a professional and ethical fashion.

*Senior level residents will demonstrate continued competency in the following objectives*

Objective:
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning

*Measurement:* Faculty rotation evaluation, 360 evaluation

Core Competency Systems-based Practice

Goals:
- Know how to utilize available resources to maximize the care of patients with spinal disorders.
- Know the impact of disability related to conditions of the spine.

*Senior level residents will demonstrate continued competency in the following objectives*

Objectives:
- Know how types of delivery systems, including workers’ compensation, differ from one another, including methods of controlling health care costs and allocating resources
- Utilize available resources to maximize the quality of patient care.

*Measurement:* Faculty rotation evaluation, Direct observation

References

SPORTS MEDICINE, ARTHROSCOPY, AND KNEE RECONSTRUCTION

The sports medicine rotation is 3 months in length. Residents will participate in patient care in outpatient, in-patient, operating room, and practice/game environments. Residents will be under direct faculty supervision. Depending on scheduling and training need, residents may be assigned this rotation at different times during their training. Therefore it is level of progression is delineated by Junior Level and by Senior Level.

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

<table>
<thead>
<tr>
<th>JUNIOR LEVEL RESIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Competency: Patient Care</strong></td>
</tr>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>- Know history-taking and physical examination of both acutely and chronically injured patients.</td>
</tr>
<tr>
<td>- Know the indications for ordering specific imaging modalities.</td>
</tr>
</tbody>
</table>

**Junior level residents will demonstrate beginning competency in the following objectives**

**Objectives:**
- Demonstrate the ability to take a complete history and perform physical examination acute and chronically injured patients
- Demonstrate the ability to collate history and exam into an anatomical diagnosis and treatment plan.
- Demonstrate ability to describe the indications for diagnostic modalities, including MRI, arthrograms, computed tomography, CT arthrotomography, and ultrasound.
- Demonstrate the ability to interpret imaging of affected areas.

**Measurement:** Faculty rotation evaluation, Direct observation

<table>
<thead>
<tr>
<th>Core Competency: Medical Knowledge:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>- Know the pathogenesis, classification, and treatment of various sports injuries.</td>
</tr>
<tr>
<td>- Know the indications for and potential complications of specific procedures used in the treatment of sports injuries.</td>
</tr>
</tbody>
</table>

**Junior level will demonstrate beginning competency in the following objectives**
### Objectives:
- Demonstrate ability to describe the pathogenesis, classification, and treatment of the following:
  - Simple and complex knee injuries
  - Meniscal and chondral knee injuries
  - Upper and lower extremity overuse injuries
  - Tendon ruptures
  - Simple and complex shoulder instabilities
  - Soft tissue injuries, including ligamentous disruptions
- Describe indications for and potential complications of the following:
  - Joint arthroscopy and related procedures
  - Ligament reconstruction
  - Meniscus replacement/transplant
  - High tibial osteotomy
  - Osteoarticular allograft/cartilage autograft transplantation
  - Shoulder ligament reconstruction

**Measurement:** Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.

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### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Know how to critically evaluate the effectiveness of the management of patients.

*Junior level residents will demonstrate beginning competency in the following objectives*

**Objective:**
- Demonstrate ability to identify gaps in knowledge and search literature to discuss aspects of evidence based medicine as they apply to clinical cases.

**Measurement:** Faculty rotation evaluation, direct observation, indications and morbidity/mortality conferences.

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### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients.
- Knows how to interact in an effective manner with patients and their families, coaches, and trainers.

*Junior level residents will demonstrate beginning competency in the following objectives*
Objectives:
- Interacts in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families, coaches, trainers.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

Measurement: Faculty rotation evaluation, 360 evaluation

Core Competency Professionalism

Goal:
- Know how to act in a professional and ethical fashion.

Junior level residents will demonstrate beginning competency in the following objectives

Objective
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

Measurement: Faculty rotation evaluation, 360 evaluation

Core Competency Systems-based Practice

Goals:
- Know how to utilize available resources to maximize the care of patients with sports-related injuries.
- Know the impact of short- and long-term disability related to sports injuries and related chronic conditions.

Junior level residents will demonstrate beginning competency in the following objectives

Objectives:
- Utilize available resources to maximize the quality of patient care.
- Describe short- and long-term disability related to sports injuries.

Measurement: Faculty rotation evaluation, direct observation
### Core Competency: Patient Care

**Goal:**
- Be proficient at history-taking and physical examination and developing treatment plans of both acutely and chronically injured patients.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
- Demonstrate proficiency in history-taking and physical examination
- Demonstrate ability to design appropriate evaluation and treatment plans for patients with more complicated problems.
- Demonstrate knowledge of expected risks/outcome of the treatment plan and apply them to patient care in development of treatment plans.

**Measurement:** Faculty rotation evaluation, direct observation.

**Goal:**
- Be competent in the performance of specific surgical skills.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives.*

**Objectives:**
- Demonstrate continued technical competency in ability to perform the following:
  - Arthroscopic surgery of the knee, shoulder, ankle, elbow (cases permitting)
  - Shoulder and knee reconstruction
  - Total knee arthroplasty
  - High tibial osteotomy

**Measurement:** Faculty rotation evaluation, Direct observation

### Core Competency: Medical Knowledge:

**Goals:**
- Know the history of various sports medicine conditions.
- Know options for treatment for various sports medicine conditions.

**Objectives:**
- Demonstrate knowledge of the history of various sports medicine conditions.
- Demonstrate knowledge of treatment options for various sports medicine conditions.

**Measurement:** Faculty rotation evaluation, Direct observation, Orthopaedic In-Training Examination.
**Goal:**
- Know how to critically evaluate the effectiveness of the management of patients with sports injuries.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Demonstrate ability to search literature and apply evidence based medicine to personal practice and patient care.

**Measurement:** Faculty rotation evaluation, direct observation.

**Core Competency Interpersonal and Communication Skills**

**Goal:**
- Know how to interact in an effective manner with all personnel in out-patient and hospital environments involved in the care of patients.
- Know how to interact in an effective manner with patients and their families, coaches, and trainers.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families, coaches, and trainers.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluation

**Core Competency Professionalism**

**Goal:**
- Know how to act in a professional and ethical fashion.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.

**Measurement:** Faculty rotation evaluation, 360 evaluation

**Core Competency Systems-based Practice**

**Goals:**
• Know how to utilize available resources to maximize the care of patients.
• Know the impact of disability related to sports injuries and related chronic conditions.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
• Utilize available resources to maximize the quality of patient care.
• Describe the short- and long-term disability associated with sports injuries and associated chronic conditions.

**Measurement:** Faculty rotation evaluation

**References**
1. OKU Sports Medicine Update
2. Operative Arthroscopy, McGinty
3. Total Knee Arthroplasty, Rand
TRAUMA

The orthopaedic trauma rotation is 3 months in length. Residents will be assigned to and evaluated in both outpatient and inpatient clinical settings, including the emergency department and operating room. Resident will be under direct faculty supervision. Residents will be expected to be able to coordinate treatment of the multitrauma patient with various other services. Even when not specifically assigned to the trauma service, residents will be gaining experience in the care of trauma patients while on call. When on call, residents will be evaluated on their knowledge and care of trauma patients, based on the goals and objectives listed below.

Depending on scheduling and training need, residents may be assigned this rotation at different times during their training. Therefore it is level of progression is delineated by Junior Level and by Senior Level.

- Junior Level Residents are defined as PGY-2 or -3
- Senior Level Residents are defined as PGY-4 or -5

<table>
<thead>
<tr>
<th>Core Competency: Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>- Be competent in the evaluation and treatment of traumatic injuries to the long bones, joints, and pelvis.</td>
</tr>
<tr>
<td>- Be competent in common procedures performed for trauma patients.</td>
</tr>
</tbody>
</table>

*Junior level residents will demonstrate beginning competency in the following objectives*

<table>
<thead>
<tr>
<th>Objectives:</th>
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</thead>
<tbody>
<tr>
<td>- Demonstrate the biomechanics and treatment alternatives for traumatic injuries of the upper extremity, lower extremity, and pelvis</td>
</tr>
<tr>
<td>- Demonstrate proficiency in the clinical examination and resuscitation of the trauma patient</td>
</tr>
<tr>
<td>- Demonstrate familiarity with the ATLS protocol for resuscitation of the trauma patient</td>
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<tr>
<td>- Demonstrate familiarity with the interpretation of radiographs of the long bones and large joints</td>
</tr>
<tr>
<td>- Demonstrate the ability to evaluate a trauma series, including lateral c-spine, pelvis, and chest radiographs</td>
</tr>
<tr>
<td>- Discuss indications for further radiographic evaluation of a trauma patient</td>
</tr>
<tr>
<td>- Demonstrate knowledge of the indications for and potential complications related to</td>
</tr>
<tr>
<td>1. IM nailing of the femur, including the type of nail and locking devices utilized</td>
</tr>
<tr>
<td>2. open reduction and internal fixation of various types of hip fractures</td>
</tr>
<tr>
<td>3. open reduction and internal fixation of fractures of the tibial plateau, shaft, or plafond</td>
</tr>
<tr>
<td>4. open reduction and internal fixation of fractures of the humerus and forearm</td>
</tr>
<tr>
<td>5. external fixation or open reduction and internal fixation of fractures of the distal radius</td>
</tr>
<tr>
<td>6. appropriate evaluation for osteoporosis</td>
</tr>
<tr>
<td>- Demonstrate technical competency in the following procedures related to trauma patients</td>
</tr>
<tr>
<td>- Acute and subsequent management of open fractures</td>
</tr>
</tbody>
</table>
• Assessment and management of compartment syndromes
• Closed reduction and immobilization of fractures
• Placement of traction pins

Measurement: Faculty rotation evaluation, Direct observation

Core Competency: Medical Knowledge:

Goal:
• Know the indications, techniques, and potential complications of common procedures utilized for trauma patients.

Junior level residents will demonstrate competency in the following objectives

Objectives:
Describe the indications and management techniques of common trauma-related conditions and procedures. This will include the following:
• Acute and subsequent management of open fractures
• Assessment and management of compartment syndromes
• Closed reduction and immobilization of fractures
• Open reduction and internal fixation of ankle fractures
• Open reduction and internal fixation of hip fractures
• Operative management of soft tissue wound not requiring flaps
• Application of external fixator to the lower extremity and distal radius
• Hemiarthroplasty of the hip
• Exposure to major joint and long bones of the upper and lower extremity

Measurement: Faculty rotation evaluation Direct observation, Orthopaedic In-Training Examination.

Core Competency Practice-Based Learning and Improvement

Goal:
• Know how to critically evaluate the effectiveness of management of trauma patients.

Junior level residents will demonstrate beginning competency in the following objectives

Objectives:
• Demonstrate beginning ability to solve problems by initiating investigations and recommending a treatment plan.
• Identify gaps in knowledge and ability to search the literature.

Measurement: Faculty rotation evaluation, direct observation.

Core Competency Interpersonal and Communication Skills

Goals:
• Know how to interact in an effective manner with all personnel in out-patient and hospital
environments involved in the care of trauma patients.

- Know how to interact in an effective manner with patients and their families.

**Junior level residents will demonstrate beginning competency in the following objectives**

**Objectives:**

- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of trauma patients.
- Demonstrate effective and appropriate communication skills with trauma patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluation

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**Core Competency Professionalism**

**Goal:**

- Know how to act in a professional and ethical fashion.

**Junior level residents will demonstrate beginning competency in the following objectives**

**Objective**

- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning

**Measurement:** Faculty rotation evaluation, 360 evaluation

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**Core Competency Systems-based Practice**

**Goals:**

- Know how to utilize available resources to maximize the care of trauma patients.
- Know the impact of disability related to trauma.

**Junior level residents will demonstrate beginning competency in the following objectives**

**Objectives:**

- Utilizes available resources to maximize the quality of care of patients.
- Describe the impact of disability related to trauma.

**Measurement:** Faculty rotation evaluation, Direct observation
### Core Competency: Patient Care

**Goals:**
- Be proficient in the clinical examination and evaluation of a patient with traumatic musculoskeletal injuries.
- Know how to develop a treatment plan for traumatic injuries to the axial and appendicular skeleton.
- Be competent in procedures used to treat traumatic injuries and their sequelae.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
- Demonstrate proficiency at clinical examination, investigation, and planning of a treatment plan for traumatic injuries to both the axial and appendicular skeleton.
- Demonstrate ability to oversee the complete examination, resuscitation, investigation, and treatment plan for a multisystem trauma patient.
- Demonstrate ability to solve problems by initiating investigations and recommending a treatment plan.
- Demonstrate technical competency in the following procedures:
  - open reduction and internal fixation of hip fractures
  - operative management of soft tissue wound not requiring flaps
  - application of external fixator to the lower extremity and distal radius
  - hemiarthroplasty of the hip
  - exposure of major joint and long bones of the upper and lower extremity

**Measurement:** Faculty rotation evaluation, direct observation

### Core Competency: Medical Knowledge:

**Goal:**
- Know indications and techniques for management of complex traumatic injuries and their sequelae.

*In addition to Junior level objectives, Senior level residents will demonstrate competency in the following objectives*

**Objectives:**
- Demonstrate knowledge of the natural history of the various injuries and the effectiveness of recommended treatment.
- Demonstrate knowledge of
  1. management of complex fractures of the upper and lower extremity
  2. evaluation and management of complex fractures of the pelvis and spine
- Demonstrate familiarity with posttraumatic reconstruction procedures, including repair of pseudarthroses and correction of angular deformities or shortening
- Demonstration of knowledge of the indications for primary amputation versus limb salvage in severely injured trauma patients.

**Measurement:** Faculty rotation evaluation Direct observation, Orthopaedic In-Training Examination
**Core Competency Practice-Based Learning and Improvement**

**Goal:**
- Know how to critically evaluate the effectiveness of the management of trauma patients.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Demonstrate ability to solve problems by initiating investigations and recommending a treatment plan.
- Demonstrate ability to search literature and apply evidence based medicine to personal practice and patient care.

**Measurement:** interaction with faculty, Morbidity and Mortality Conference participation.

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**Core Competency Interpersonal and Communication Skills**

**Goals:**
- Know how to interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients.
- Know how to interact in an effective manner with patients and their families.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of patients.
- Demonstrate effective and appropriate communication skills with patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 evaluation
### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.  
*Senior level residents will demonstrate continued competency in the following objectives*

**Objective:**
- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning

**Measurement:** Faculty rotation evaluation, 360 evaluation

### Core Competency Systems-based Practice

**Goals:**
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to musculoskeletal trauma.

*Senior level residents will demonstrate continued competency in the following objectives*

**Objectives:**
- Utilize available resources to maximize the quality of patient care.
- Describe the impact of disability related to musculoskeletal trauma.

**Measurement:** Faculty rotation evaluation, direct observation

### References

2. Rockwood, Green, and Buckles: Fractures in Adults.
6. Orthopaedic Knowledge Update: Trauma
The objectives for the orthopedic surgery rotation at the VA will be to develop and enhance administrative, clinical, and surgical skills appropriate to each level under the direct supervision of staff. Residents will learn an alternative model of providing healthcare, while evaluating and treating patients with common musculoskeletal conditions. Residents will work in a multi-professional environment. Residents will complete 3 rotations at the VA during the course of their 5 years of residency training (during their PGY-2, 4, and 5 years), increasing their level of knowledge and technical competency with each subsequent rotation.

**PGY-2**

**Core Competency: Patient Care**

**Goals:**
- Know how to obtain a complete patient history and perform a physical exam.
- Know how to evaluate and develop treatment plans for patients with common musculoskeletal conditions.
- Know how to perform basic orthopaedic procedures.

*PGY2 will demonstrate beginning competency in the following objectives*

**Objectives:**
- Demonstrate basic clinical skills in history taking and examining patients, as well as the ability to develop a differential diagnosis and describe options for management.
- Develop skills in planning and managing individual patients in outpatient and inpatient surroundings.
- Demonstrate competence in major joint aspiration and injection.
- Demonstrate skills in treating simple fractures by open and closed methods, joint dislocations, carpal tunnel releases, and knee arthroscopy.
- Demonstrate the ability to care for uncomplicated hip and ankle fractures by open means.

**Measurement:** Faculty rotation evaluation, Direct Observation

**Core Competency: Medical Knowledge:**

**Goals:**
- Know the pathogenesis, presentation, evaluation, and management of common musculoskeletal conditions.
- Know the indications for ordering laboratory and imaging tests.
- Know how to interpret plain radiographs.

*PGY2 will demonstrate competency in the following objectives*

**Objectives:**
- Demonstrate knowledge of available laboratory and imaging tests and the indications for obtaining them.
- Demonstrate knowledge of the pathogenesis and presentation of common adult orthopaedic problems, especially degenerative conditions.
- Demonstrate familiarity with non-operative and surgical treatment of common adult orthopaedic conditions.
- Demonstrate proficiency in interpretation of x-rays, scans (bone CT and MRI) and laboratory values.
- Describe relevant anatomy and common surgical approaches.

**Measurement:** Faculty rotation evaluation, Orthopaedic In-Training Examination.

### Core Competency: Practice-Based Learning and Improvement

**Goal:**
- Know how to investigate and evaluate personal patient care practices and identify gaps in knowledge.

**PGY2 will demonstrate beginning competency in the following objectives**

**Objectives:**
- Identify gaps in learning and establish plan to improve personal practice.
- Analyze practice based experiences and perform practice-based improvement activities using systematic knowledge

**Measurement:** Faculty rotation evaluation, Morbidity and Mortality Conference participation.

### Core Competency: Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel in the out-patient and hospital environments involved in the care of orthopaedic patients.
- Know how to interact in an effective manner with orthopaedic patients and their families.

**PGY2 will demonstrate competency in the following objectives.**

**Objectives:**
- Interact in an effective manner with all personnel in the out-patient hospital environments involved in the care of orthopaedic patients.
- Demonstrate effective and appropriate communication skills with orthopaedic patients and their families.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation
<table>
<thead>
<tr>
<th>Core Competency: Professionalism</th>
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<tbody>
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<td><strong>Goal:</strong></td>
</tr>
<tr>
<td>- Know how to act in a professional and ethical fashion.</td>
</tr>
<tr>
<td><em>PGY2 will demonstrate beginning competency in the following objectives</em></td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>- Demonstrate professional dress, behavior and attitudes, including altruism and a commitment to lifelong learning.</td>
</tr>
<tr>
<td>- Ability to provide continuity of care, availability, responsiveness to patient or family needs.</td>
</tr>
<tr>
<td>- Ability to understand and provide ethical treatment of patients, families, and co-workers, and sensitivity to different patient populations.</td>
</tr>
<tr>
<td>- Demonstrate ability to teach and supervise medical students in the care of patients</td>
</tr>
<tr>
<td><strong>Measurement:</strong> Faculty rotation evaluation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Competency: Systems-Based Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals:</strong></td>
</tr>
<tr>
<td>- Know how to utilize available resources to maximize the care of patients for both inpatient and outpatient settings.</td>
</tr>
<tr>
<td>- Knows the impact of disability related to orthopaedic conditions.</td>
</tr>
<tr>
<td><em>PGY2 will demonstrate beginning competency in the following objectives</em></td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>- Utilize available resources to maximize the quality of care of patients.</td>
</tr>
<tr>
<td>- Understand and develop the ability to appropriately and effectively interact with patients who have potential secondary gain (e.g. Medicare, Medicaid, worker’s compensation).</td>
</tr>
<tr>
<td><strong>Measurement:</strong> Faculty rotation evaluation</td>
</tr>
</tbody>
</table>
## PGY4

### Core Competency: Patient Care

**Goals:**

- Know how to obtain a complete patient history and physical exam and begin to formulate appropriate assessments and treatment plans for patients.
- Be proficient in common surgical procedures, such as arthroscopy, fracture fixation, amputations, and ligament repairs.

*PGY-4 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-2 level residents:*

**Objectives:**

- Demonstrate ability to complete a patient history and physical exam
- Demonstrate ability to classify musculoskeletal conditions, including fractures, and define implications for treatment.
- Demonstrate proficiency in common surgical approaches to the extremities.
- Demonstrate continued progress in surgical skills, particularly in routine diagnostic arthroscopies and uncomplicated menisectomies of the knee; open reduction and internal fixation of open and closed fractures of forearm, hand, tibia, fibula, and femur fractures, as well as other uncomplicated fractures; amputations; and general ligament repairs.

**Measurement:** Faculty rotation evaluation

### Core Competency: Medical Knowledge:

**Goals:**

- Know common surgical approaches
- Know how to classify musculoskeletal conditions, including fractures, and define implications for treatment.
- Know operative and non-operative options for treatment, including indications, contraindications, and potential complications.

*PGY-4 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-2 level residents:*

**Objectives:**

- Describe classification of musculoskeletal conditions.
- Demonstrate knowledge of indications, contraindications, and potential complications of operative management of patients with musculoskeletal conditions.

**Measurement:** Faculty rotation evaluation, Orthopaedic In-Training Examination.
### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Appraise and assimilate scientific evidence related to orthopaedic practice with focus on improved personal patient care practice.

*PGY-4 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-2 level residents:*

**Objectives:**
- Demonstrate application of knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- Assist in education of junior residents and medical students.

**Measurement:** Faculty rotation evaluation

### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel involved in patient care
- Know how to interact in an effective manner with patients and families.

*PGY-4 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-2 level residents:*

**Objectives:**
- Demonstrate effective and appropriate communication skills with patients and their families.
- Work effectively with colleagues and hospital personnel to coordinate optimum patient care.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation, 360 degree evaluations.

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*PGY-4 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-2 level residents:*

**Objective**
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning

**Measurement:** Faculty rotation evaluation

### Core Competency Systems-based Practice

**Goals:**
Know how to utilize available resources to maximize the care of patients.  
Know the impact of disability related to musculoskeletal conditions.

**PGY-4 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-2 level residents:**

**Objectives:**
- Teach junior residents the importance of quality orthopaedic patient care and assist patients in dealing with system complexities
- Utilizes available resources to maximize the quality of care of orthopaedic patients.
- Describe the impact of disability related to musculoskeletal conditions.

**Measurement:** Faculty rotation evaluation

---

**PGY5**

**Core Competency: Patient Care**

**Goals:**
- Know how to obtain a complete patient history and physical exam
- Know how to perform specific, more complex surgical procedures

**PGY-5 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-4 level residents:**

**Objectives:**
- Demonstrate the ability to complete patient history and physical exam
- Demonstrate the ability to perform and explain specific surgical procedures to patients including but not limited to:
  - total joint arthroplasties and revisions
  - arthroscopic ligament reconstructions
  - meniscal repairs
  - arthrodesis of joints
  - simple tumor removal
  - reconstructive hand surgery
  - reconstructive foot and ankle surgery

**Measurement:** Faculty rotation evaluation

---

**Core Competency: Medical Knowledge:**

**Goals:**
- Know how to plan surgical procedures, including identification of equipment needed.
- Know complications of non-operative and operative patient management.

**PGY-5 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-4 level residents:**

**Objectives:**
- Demonstrate ability to successfully plan all surgery cases, including instruments needed.
- Demonstrate knowledge of precipitating factors and treatment of complications.

**Measurement:** Faculty rotation evaluation, Orthopaedic In-Training Examination.
### Core Competency Practice-Based Learning and Improvement

**Goal:**
- Appraise and assimilate scientific evidence related to orthopaedic conditions with focus on improved personal patient care practices

*PGY-5 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-4 level residents:*

**Objective:**
- Apply and demonstrate knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness

**Measurement:** Faculty rotation evaluation

### Core Competency Interpersonal and Communication Skills

**Goals:**
- Know how to interact in an effective manner with all personnel involved in the care of patients with musculoskeletal conditions.
- Know how to interact in an effective manner with patients and their families.

*PGY-5 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-4 level residents:*

**Objectives:**
- Demonstrate effective and appropriate communication skills with patients and their families.
- Work effectively with colleagues and hospital personnel to coordinate optimum patient care.
- Demonstrate culturally competent communication skills in interactions with colleagues, hospital personnel, patients, and families.

**Measurement:** Faculty rotation evaluation

### Core Competency Professionalism

**Goal:**
- Know how to act in a professional and ethical fashion.

*PGY-5 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-4 level residents:*
Objectives:
- Demonstrate professional behavior and attitudes, including altruism and a commitment to lifelong learning
- Participate in the supervision and education of junior residents, 4th year residents, and medical students.

**Measurement:** Faculty rotation evaluation

### Core Competency Systems-based Practice

**Goals:**
- Know how to utilize available resources to maximize the care of patients.
- Know the impact of disability related to conditions.

*PGY-5 will demonstrate competency in the following objectives in addition to the knowledge and competencies expected of PGY-4 level residents:*

**Objectives:**
- Demonstrate the ability to teach junior residents about the importance of quality orthopaedic patient care
- Demonstrate the ability to assist patients in dealing with system complexities.
- Utilize available resources to maximize the quality of care of orthopaedic patients.

**Measurement:** Faculty rotation evaluation
Orthopedic Surgery Residency Program
Faculty Evaluation by Resident

1. The attending displays a sensitive, caring, and respectful attitude toward patients and their families.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent

2. The attending demonstrates respect for other health care providers.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent

3. The attending is able to communicate the material and/or provide supervision effectively and in an organized manner.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent

4. The attending is readily available for discussion, questions, and consultation.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent

5. The attending relates basic principles and techniques to surgical situations.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent

6. The attending explicitly encourages further learning and motivates residents to self-learn.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent

7. The attending provides useful feedback including constructive criticism to residents and other team members.
   - No Interaction
   - Unsatisfactory (Comment required)
   - Marginal (Comment required)
   - Satisfactory
   - Very Good
   - Excellent
8. The attending has sufficient overall knowledge of his/her subspeciality.
   | No Interaction | Satisfactory |
   | Unsatisfactory (Comment required) | Very Good |
   | Marginal (Comment required) | Excellent |

9. The attending is intellectually stimulating and encourages questions and participation.
   | No Interaction | Satisfactory |
   | Unsatisfactory (Comment required) | Very Good |
   | Marginal (Comment required) | Excellent |

10. The attending allows appropriate resident participation in surgical procedures.
    | No Interaction | Satisfactory |
    | Unsatisfactory (Comment required) | Very Good |
    | Marginal (Comment required) | Excellent |

11. The attending attends weekly conferences.
    | No Interaction | Satisfactory |
    | Unsatisfactory (Comment required) | Very Good |
    | Marginal (Comment required) | Excellent |

12. The attending provides effective overall contributions to the Orthopedic Surgery program.
    | No Interaction | Satisfactory |
    | Unsatisfactory (Comment required) | Very Good |
    | Marginal (Comment required) | Excellent |
Orthopedic Surgery Residency Program
Resident Peer Evaluation Form

Name of Resident you are evaluating: _____________________________________________

Please check the appropriate box.

Patient Care

1. How comfortable do you feel picking up patients this resident has managed?
   ( ) All of the time ( ) Somewhat ( ) NA
   ( ) Most of the time ( ) Not at all

2. Would you feel comfortable having this resident cover your patients?
   ( ) All of the time ( ) Somewhat ( ) NA
   ( ) Most of the time ( ) Not at all

3. How does this resident handle his/her duty responsibilities?
   ( ) Excellent ( ) Fair ( ) NA
   ( ) Good ( ) Poor

Communication

1. How does this resident transfer patient care?
   ( ) Excellent ( ) Fair ( ) NA
   ( ) Good ( ) Poor

2. How does this resident’s written communication (admission notes, clinic notes, discharge
   notes) make it easier for you to care for patients?
   ( ) Excellent ( ) Fair ( ) NA
   ( ) Good ( ) Poor

Professionalism

1. Is this resident available when needed?
   ( ) All of the time ( ) Somewhat ( ) NA
   ( ) Most of the time ( ) Not at all

2. Is this resident a role model for junior residents or students?
   ( ) All of the time ( ) Somewhat ( ) NA
   ( ) Most of the time ( ) Not at all
Interpersonal Skills

1. Is this resident a team player?
   ( ) All of the time ( ) Somewhat ( ) NA
   ( ) Most of the time ( ) Not at all

2. Is this resident an effective teacher?
   ( ) All of the time ( ) Somewhat ( ) NA
   ( ) Most of the time ( ) Not at all

COMMENTS
## Orthopedic Surgery Residency Program Evaluation by Resident

1. I saw a sufficient number of patients to feel comfortable performing patient examinations.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

2. I increased my knowledge of operative indications and contraindications.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

3. I learned interpersonal skills which will be useful.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

4. I was treated in a fair and respectful manner.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

5. I participated in a sufficient number of surgeries.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

6. The surgical experience increased my knowledge.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

7. The surgical experience increased my technical skills.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

8. I was treated in a fair and respectful manner.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

9. The anatomy and surgical strategies were presented to me
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree
10. The on-call volume was reasonable.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

11. The call room was satisfactory.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

12. The on-call support from senior residents was satisfactory.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

13. The on-call support from attendings was satisfactory.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

14. Basic science conferences were valuable.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

15. Clinical conferences were valuable.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

16. Topics presented during the core lectures reflected the topics on the OITE.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

17. JBJS Journal Club was valuable.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |

18. Specialty journal clubs were valuable.
   | Strongly agree | Disagree | No Opinion | Agree | Strongly disagree |
19. X-ray conference was valuable

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

20. I was able to participate in adequate continuity of care by seeing patients in the clinic and the operating room.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

21. I feel prepared for graduating to the next year of training/starting practice.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

22. I feel confident that I will do well on the OITE/Step I of Boards.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>
Orthopedic Surgery Residency Program
Research Rotation Evaluation by Resident

1. Did the orthopedic research support personnel provide adequate help and support?
   No interaction  Seldom  Usually
   Never  Sometimes  Always

2. Did you receive sufficient mentoring and guidance from the faculty?
   No interaction  Seldom  Usually
   Never  Sometimes  Always

3. Please rate this statement: The expectations of the research rotation are realistic.
   N/A  Somewhat disagree  Somewhat agree
   Disagree  Neutral  Agree

4. Please rate this statement: You were successful in your research effort.
   N/A  Somewhat disagree  Somewhat agree
   Disagree  Neutral  Agree

5. Please rate this statement: You put forth sufficient effort to produce a quality research publication.
   N/A  Somewhat disagree  Somewhat agree
   Disagree  Neutral  Agree

6. Overall the research rotation has a good experience. If not, what would you like to see change?
   N/A  Somewhat disagree  Somewhat agree
   Disagree  Neutral  Agree

7. You learned more about research and how to do research from the research rotation?
   N/A  Somewhat disagree  Somewhat agree
   Disagree  Neutral  Agree

8. What was the greatest challenge in completing your research? Please explain.

9. What was the most rewarding or beneficial aspect of the rotation? Please explain.
Orthopedic Surgery Residency Program
Resident Research Rotation by Faculty

1. The resident was prepared to begin research (including project identification, planning, protocol, development, materials planning and ordering).
   
   N/A   Very Good
   Unsatisfactory  Excellent
   Satisfactory

2. The resident was present in the lab as required.
   
   N/A   Very Good
   Unsatisfactory  Excellent
   Satisfactory

3. The resident was productively engaged in research during the period of the research rotation.
   
   N/A   Very Good
   Unsatisfactory  Excellent
   Satisfactory

4. The resident diligently kept a lab notebook and completed substantial portions of a publishable paper (literature search, background, introduction, materials & methods).
   
   N/A   Very Good
   Unsatisfactory  Excellent
   Satisfactory

5. The resident willingly participated in and assisted in other research activities.
   
   N/A   Very Good
   Unsatisfactory  Excellent
   Satisfactory

6. The resident completed his/her individual research project(s) during the time allotted for the Research Rotation.
   
   N/A   Very Good
   Unsatisfactory  Excellent
   Satisfactory

7. Additional Comments:

   _________________________________________________________
   _________________________________________________________
   _________________________________________________________
   _________________________________________________________
## Orthopedic Surgery Residency Program
### Resident Evaluation for Clinical Competence by Faculty

8. Resident responds to pages in a timely fashion. (PRO)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

9. Resident consistently completes chart work and dictations in a timely fashion. (PRO)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

10. Resident consistently participates in outpatient clinic (PRO)
    - No Interaction: Satisfactory
    - Unsatisfactory (Comment required): Very Good
    - Marginal (Comment required): Excellent

11. Resident demonstrates the ability to make clinical assessment, orders and interprets relevant tests, and chooses appropriate treatment (CJ)
    - No Interaction: Satisfactory
    - Unsatisfactory (Comment required): Very Good
    - Marginal (Comment required): Excellent

12. Resident demonstrates communication and interpersonal skills that enable establishing and maintaining professional relationships with patients and their families (ICS)
    - No Interaction: Satisfactory
    - Unsatisfactory (Comment required): Very Good
    - Marginal (Comment required): Excellent

13. Resident demonstrates the ability to counsel patients and obtain informed consents (ICS)
    - No Interaction: Satisfactory
    - Unsatisfactory (Comment required): Very Good
    - Marginal (Comment required): Excellent

14. Resident works effectively with others as a member or leader of a health care team. (ICS)
    - No Interaction: Satisfactory
    - Unsatisfactory (Comment required): Very Good
    - Marginal (Comment required): Excellent
15. Resident provides care that is compassionate, appropriate, and effective for the promotion of health, prevention of illness, treatment of disease, and care at the end of life (PC)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

16. Resident demonstrates sensitivity and responsiveness to patients (e.g. culture diversity, age, gender, and disabilities). (PC)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

17. Resident uses scientific methods and evidence to investigate, evaluate, and improve patient care practices (PBL)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

18. Resident maintains a willingness to learn from error and uses error to improve the process of patient care. (PBL)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

19. Resident facilitates the learning of students, other residents, and other health care professionals. (PBL)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

20. Resident demonstrates an understanding of the contexts and systems in which health care is provided and the ability to apply this knowledge. (SBP).
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent

21. Resident demonstrates the ability to plan a operation, prep and position patients, knowledge of surgical exposures and anatomy, familiarity with instruments, and would closure. (MK)
   - No Interaction: Satisfactory
   - Unsatisfactory (Comment required): Very Good
   - Marginal (Comment required): Excellent
22. Resident demonstrated advancing endoscopic, arthroscopic, and/or microsurgical skills. (MK)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

23. Resident demonstrates development of appropriate and safe surgical skills. (MK)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

24. Resident demonstrates active learning of orthopedic injuries and diseases. (MK)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

25. Resident demonstrates knowledge of established and evolving clinical sciences and the application of that knowledge to patient care. (MK)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

26. Resident demonstrates behaviors that reflect a commitment to ethical practice and a responsible attitude toward patients and the profession. (PRO)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

27. Resident demonstrates responsiveness to the needs of patients and society that supersedes self-interest. (PRO)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

28. Resident demonstrates a commitment to excellence and on-going professional development. (PRO)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |

29. Resident actively participates in journal clubs and conferences. (MK)

| No Interaction | Satisfactory |
| No Interaction | Satisfactory |
| Unsatisfactory (Comment required) | Very Good |
| Marginal (Comment required) | Excellent |
30. Overall, I would rate this resident as:
   
   No Interaction  Satisfactory
   Unsatisfactory (Comment required)  Very Good
   Marginal (Comment required)  Excellent

31. Do you think this resident should progress to the next level?
   Yes  No

32. Do you think this resident should continue in the residency program?
   Yes  No

33. Evaluator’s remarks:

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
## Orthopedic Surgery Residency Program
### Mini-Clinical Evaluation Exercise (CEX)

<table>
<thead>
<tr>
<th>Resident:</th>
<th>Date:</th>
</tr>
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<tbody>
<tr>
<td>PGY Level:</td>
<td>Staff</td>
</tr>
<tr>
<td>Patient Diagnosis:</td>
<td></td>
</tr>
<tr>
<td>Patient:</td>
<td>Age:</td>
</tr>
<tr>
<td>Complexity (mark one):</td>
<td>Low:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Interviewing Skills – Facilitates patient’s telling of story; effectively uses questions/directions to obtain accurate, adequate information needed; responds appropriately to affect, non-verbal cues.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Physical Examination Skills – Follows efficient, logical sequence, balances screening/diagnostic steps for problem; informs patients; sensitive to patient’s comforts, modesty.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Humanistic Qualities/Professionalism – Shows respect, compassion, empathy, establishes trust; attends to patient’s needs of comfort, modest, confidentiality, and information.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinical Judgment – Selectively orders/perform appropriate diagnostic studies, considers risks, benefits.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Counseling Skills – Explains rationale for test/treatment, obtains patient’s consent, educates/counsels regarding management.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization/Efficiency – Prioritizes: is timely; succinct.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Clinical Competence – Demonstrates judgment, synthesis, caring-effectiveness, efficiency.</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Comments:

Resident Signature: _______________________________________________________

Staff Signature: __________________________________________________________

*Adapted from Attending Physicians’ Pocket Book of Mini-Clinical Evaluation Exercise (CEX) Forms, American Board of Internal Medicine.*
Orthopedic Surgery Residency Program
Nursing and Allied Health Evaluation of Orthopedic Surgery Resident

RESIDENT __________________________ YEAR OF TRAINING _______________________

EVALUATION PERIOD ____________________________________________________________

The Department of Orthopedic Surgery expects its residents to demonstrate the communication, interpersonal and professionalism skills that promote care delivered in the “best interest of the patient.” In an effort to assess these attributes, you are being asked to complete this evaluation based on your interactions with the above-named resident. Please complete the form by checking “needs improvement” or “satisfactory” in the space provided after each statement. If you cannot comment on an item, please leave it blank. All “needs improvement” responses require explanation in the space provided on the back. Your answers will remain confidential.

<table>
<thead>
<tr>
<th>COMMUNICATION/INTERPERSONAL SKILLS</th>
<th>Needs Improvement</th>
<th>Satisfactory</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident is learning effective communication skills and maintains professional and therapeutic relationship.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently demonstrates willingness to listen to patients and families</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently demonstrates willingness to listen to nursing and allied staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently explains information to patients and families using clear, understandable terms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently keeps patients, families, and nurses informed of changes in the care plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently writes orders that are clear and legible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently participates cooperatively in multidisciplinary rounds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROFESSIONALISM</th>
<th>Needs Improvement</th>
<th>Satisfactory</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident demonstrates behaviors that reflect ongoing commitment to continuous professional development, ethical practice &amp; sensitivity to diversity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altruism/Empathy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident is consistently attentive to details of patient comfort and delivery of care (renewing meds, resuming diet after tests, etc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident accepts inconvenience when necessary to meet the needs of the patient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently respects patient privacy when conducting examinations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently uses respectful language when discussing patients to others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident is consistently courteous and receptive to nursing and allied health staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident is a team player and appreciative of all health care team members’ contributions.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Responsibility

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Needs Improvement</th>
<th>Satisfactory</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident consistently responds in timely manner when paged or called</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident consistently follows through on cross cover issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Integrity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident maintains composure during stressful/crisis situations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident is honest, reliable, and accountable.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please provide specific comments to substantiate any “needs improvement” response.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Do you have any additional concerns regarding this resident’s communication, interpersonal, or professionalism skills?

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Please provide information if this resident has consistently performed in an outstanding manner.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
COMMUNICATION, INTERPERSONAL SKILLS, AND PROFESSIONALISM

EVALUATION FORM

ORTHOPEDIC SURGERY RESIDENT

Date: ______________________________

Physician’s Name: ______________________________

In order to improve your medical care, you are being asked to complete this brief questionnaire about the physician pictured below.

(Picture)

Your answers to the following questions will remain confidential. Participation will not affect your current or future care at The University of Kansas Medical Center.

How is the physician at:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Unable to evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening carefully to you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using words you can understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>your evaluation and treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeking your input before making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addressing your questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Showing interest in your condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please place completed form in attached envelope and give to your patient services representative or your nurse.

Thank you for your time and input.
 FORMA DE COMMUNICACION, INTERPERSONAL, CAULIDADES Y EVALUACION PROFESIONAL

RESIDENTE DE ORTHAPEDIC

Fecha: ______________________ ____

Nombre de Doctor: ____________________________

Para recibir el mejor tratamiento sobre su condición médica desamos que completa el cuestionario o preguntas acerca la manera que fue atendido por el doctor.

(Picture)

Su participación en contestar las preguntas son confidenciales y en ninguna manera afectara su presente tratamiento ni en el futuro.

Como se presento el Doctor:

<table>
<thead>
<tr>
<th></th>
<th>Excelente</th>
<th>Muy Bueno</th>
<th>Bueno</th>
<th>Mediano</th>
<th>Pobre</th>
<th>No puedo evaluar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estuvo atento y con mucho interés en su condición</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explicando simplemente el tratamiento de su condición</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensenyó interés en sus preguntas antes de hacer una decisión</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manstrando interés con sus preguntas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avisando el mejor tratamiento</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ponga la forma completa en el sobre y entregálo al Representante de Servicios de Pacientes o a la enfermera
Gracias por su tiempo y su información.
Orthopedic Surgery Residency Program Evaluation by Faculty

1. Residents have adequate volume and diversity of patients and cases.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

2. Residents demonstrate a commitment to excellence in their daily activities.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

3. Residents learn the appropriate surgical skills for their level by the end of each rotation.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

4. Residents learn appropriate clinical evaluation skills (e.g., history-taking, physical examination, interpretation of diagnostic tests) for their level by the end of each rotation.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

5. X-ray conference contributes to the residents’ educational development.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

6. M&M contributes to the residents’ educational development.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

7. JBJS journal clubs contribute to the residents’ educational development.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

8. Educational conferences address fundamental musculoskeletal topics.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

9. I have adequate time and facilities for research and other scholarly activities.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree
10. There are adequate resources for resident education.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

12. I am aware of the ACGME Duty Hours Policy and the need to identify resident fatigue.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

13. The program staff is responsive to the needs and suggestions of the residents and faculty.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

14. The residency education committee meetings are useful to communicate program goals and residency requirements.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

15. The program provides adequate forum for faculty and residents to express complaints and concerns.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

16. The training program emphasizes patient care that is compassionate, appropriate, and effective.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

17. The training program emphasizes evaluation of patient care practices, appraisal and assimilation of scientific evidence, and practice improvements.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree

18. The training program emphasizes interpersonal and communication skills that result in effective information exchange and collaboration with patients and other health care professionals.
   - Strongly agree
   - Disagree
   - No Opinion
   - Agree
   - Strongly disagree
19. The training program emphasizes commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

   Strongly agree  Disagree  No Opinion
   Agree           Strongly disagree

20. The training program emphasizes awareness of and responsiveness to the larger context and system of health care.

   Strongly agree  Disagree  No Opinion
   Agree           Strongly disagree

21. The residents receive adequate teaching of core orthopaedic knowledge.

   Strongly agree  Disagree  No Opinion
   Agree           Strongly disagree

22. What are the program’s strengths?

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

23. What are the program’s weaknesses?

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________


_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

25. Overall rating

   Excellent  Fair  Poor
   Good       No opinion

26. Additional comments

_______________________________________________________________________
_______________________________________________________________________
_____________________________________________________________________