3 Year Overview Curriculum
Internal Medicine Residency Program
University of Kansas Medical Center
Adapted from the ABIM Developmental Milestones

Post Graduate Years 1-3
PGY1 – standard text
PGY2 – standard and italicized text
PGY3 – standard, italicized and bold italicized text

Patient Care
1. History and Data Gathering
   a. Acquire accurate and relevant history from the patient in an efficiently customized, prioritized, and hypothesis driven fashion
   b. Seek and obtain appropriate, verified, and prioritized data from secondary sources (e.g. family, records, pharmacy)
   c. Obtain relevant historical subtleties that inform and prioritize both differential diagnoses and diagnostic plans, including sensitive, complicated, and detailed information that may not often be volunteered by the patient
   d. Role model gathering subtle and reliable information from the patient for junior members of the healthcare team
2. Performing a Physical Examination
   a. Perform an accurate physical examination that is appropriately targeted to the patient's complaints and medical conditions. Identify pertinent abnormalities using common maneuvers
   b. Accurately track important changes in the physical examination over time in the outpatient and inpatient settings
   c. Demonstrate and teach how to elicit important physical findings for junior members of the healthcare team
   d. Routinely identify subtle or unusual physical findings that may influence clinical decision making, using advanced maneuvers where applicable
3. Clinical Reasoning
   a. Synthesize all available data, including interview, physical examination, and preliminary laboratory data, to define each patient's central clinical problem
   b. Develop prioritized differential diagnoses, evidence-based diagnostic and therapeutic plan for common inpatient and ambulatory conditions
   c. Modify differential diagnosis and care plan based upon clinical course and data as appropriate
   d. Recognize disease presentations that deviate from common patterns and that require complex decision making
4. Invasive Procedures
   a. Appropriately perform invasive procedures and provide post-procedure management for common procedures
5. Diagnostic Tests
   a. Make appropriate clinical decisions based upon the results of common diagnostic testing, including but not limited to routine blood chemistries, hematologic studies, coagulation tests, arterial blood gases, ECG, chest radiographs, pulmonary function tests, urinalysis and other body fluids
b. Make appropriate clinical decision based upon the results of more advanced diagnostic tests

6. Patient Management
   a. Recognize situations with a need for urgent or emergent medical care including life threatening conditions
   b. Recognize when to seek additional guidance
   c. Provide appropriate preventive care and teach patient regarding self-care
   d. With supervision, manage patients with common clinical disorders seen in the practice of inpatient and ambulatory general internal medicine
   e. With minimal supervision, manage patients with common and complex clinical disorders seen in the practice of inpatient and ambulatory general internal medicine
   f. Initiate management and stabilize patients with emergent medical conditions
   g. Manage patients with conditions that require intensive care
   h. Independently manage patients with a broad spectrum of clinical disorders seen in the practice of general internal medicine
   i. Manage complex or rare medical conditions
   j. Customize care in the context of the patient’s preferences and overall health

7. Consultative Care
   a. Provide specific, responsive consultation to other services
   b. Provide internal medicine consultation for patients with more complex clinical problems requiring detailed risk assessment

Medical Knowledge
1. Core Content Knowledge
   a. Understand the relevant pathophysiology and basic science for common medical conditions
   b. Demonstrate sufficient knowledge to diagnose and treat common conditions that require hospitalization
   c. Demonstrate sufficient knowledge to evaluate common ambulatory conditions
   d. Demonstrate sufficient knowledge to diagnose and treat undifferentiated and emergent conditions
   e. Demonstrate sufficient knowledge to provide preventive care
   f. Demonstrate sufficient knowledge to identify and treat medical conditions that require intensive care
   g. Demonstrate sufficient knowledge to evaluate complex or rare medical conditions and multiple coexistent conditions
   h. Understand the relevant pathophysiology and basic science for uncommon or complex medical conditions
   i. Demonstrate sufficient knowledge of socio-behavioral sciences including but not limited to health care economics, medical ethics, and medical education

2. Diagnostic Tests
   a. Understand indications for and basic interpretation of common diagnostic testing, including but not limited to routine blood chemistries, hematologic studies, coagulation tests, arterial blood gases, ECG, chest radiographs, pulmonary function tests, urinalysis and other body fluids
   b. Understand indications for and has basic skills in interpreting more advanced diagnostic tests
   c. Understand prior probability and test performance characteristics

Practice Based Learning and Improvement
1. Improve the Quality of Care for a Panel of Patients
   a. Appreciate the responsibility to assess and improve care collectively for a panel of patients
b. Perform or review audit of a panel of patients using standardized, disease-specific, and evidence-based criteria

c. Reflect on audit compared with local or national benchmarks and explore possible explanations for deficiencies, including doctor-related, system-related, and patient-related factors

d. Identify areas in resident’s own practice and local system that can be changed to improve

e. **Engage in quality improvement intervention**

2. **Ask Answerable Questions for Emerging Information Needs**
   a. Identify learning needs (clinical questions) as they emerge in patient care activities
   b. **Classify and precisely articulate clinical questions**
   c. Develop a system to track, pursue, and reflect on clinical questions

3. **Acquires the Best Advice**
   a. Access medical information resources to answer clinical questions and library resources to support decision making
   b. **Effectively and efficiently search NLM database for original clinical research articles**
   c. **Effectively and efficiently search evidence-based summary medical information resources**
   d. **Appraise the quality of medical information resources and select among them based on the characteristics of the clinical question**

4. **Appraises the Evidence for Validity and Usefulness**
   a. With assistance, appraise study design, conduct and statistical analysis in clinical research papers
   b. With assistance, appraise clinical guideline recommendations for bias
   c. **With assistance, appraise study design, conduct, and statistical analysis in clinical research papers**
   d. **Independently, appraise clinical guideline recommendations for bias and cost-benefit considerations**

5. **Applies the evidence to decision-making for individual patients**
   a. Determine if clinical evidence can be generalized to an individual patient
   b. **Customize clinical evidence for an individual patient**
   c. **Communicate risks and benefits of alternatives to patients**
   d. **Integrate clinical evidence, clinical context, and patient preferences into decision-making**

6. **Improves Via Feedback**
   a. Respond welcomingly and productively to feedback from all members of the health care team including faculty, peer residents, students, nurses, allied health workers, patients and their advocates
   b. Actively seek feedback from all members of the health care team
   c. **Calibrate self-assessment with feedback and other external data**
   d. **Reflect on feedback in developing plans for improvement**

7. **Improves via self-assessment**
   a. **Maintain awareness of the situation in the moment and respond to meet situational needs**
   b. **Reflect (in action) when surprised, applies new insights to future clinical scenarios, and reflects (on action) back on the process**

8. **Participate in education of all members of the health care team**
   a. Actively participate in teaching conferences
   b. **Integrate teaching, feedback, and evaluation with supervision of interns’ and students’ patient care**
   c. **Take a leadership role in the education of all members of the health care team.**
**Interpersonal and Communication Skills**

1. Communicate effectively
   a. Provide timely and comprehensive verbal and written communication to patients/advocates
   b. Effectively use verbal and non-verbal skills to create rapport with patients/families
   c. Use communication skills to build a therapeutic relationship
   d. *Engage patients/advocates in shared decision-making for uncomplicated diagnostic and therapeutic scenarios*
   e. Utilize patient-centered education strategies
   f. *Engage patients/advocates in shared decision-making for difficult, ambiguous or controversial scenarios*
   g. Appropriately counsel patients about the risks and benefits of tests and procedures highlighting cost awareness and resource allocation
   h. **Role model effective communication skills in challenging situations**

2. Intercultural sensitivity
   a. Effectively use an interpreter to engage patients in the clinical setting including patient education
   b. Demonstrate sensitivity to differences in patients including but not limited to race, culture, gender, sexual orientation, socioeconomic status, literacy, and religious beliefs
   c. **Actively seek to understand patient differences and views and reflects this in respectful communication and shared decision-making with the patient and the healthcare team**

3. Transitions of Care
   a. Effectively communicate with other caregivers in order to maintain appropriate continuity during transitions of care
   b. **Role model and teach effective communication with next caregivers during transitions of care**

4. Interprofessional team
   a. Deliver appropriate, succinct, hypothesis-driven oral presentations
   b. Effectively communicate plan of care to all members of the healthcare team
   c. **Engage in collaborative communication with all members of the healthcare team**

5. Consultation
   a. Request consultative services in an effective manner
   b. Clearly communicate the role of consultant to the patient, in support of the primary care relationship
   c. **Communicate consultative recommendations to the referring team in an effective manner**

6. Health Records
   a. Provide legible, accurate, complete, and timely written communication that is congruent with medical standards
   b. **Ensure succinct, relevant, and patient-specific written communication**

**Professionalism**

1. Adhere to basic ethical principles
   a. Document and report clinical information truthfully
   b. Follow formal policies
   c. Accept personal errors and honestly acknowledge them
   d. **Uphold ethical expectations of research and scholarly activity**

2. Demonstrate compassion and respect to patients
   a. Demonstrate empathy and compassion to all patients
   b. Demonstrate a commitment to relieve pain and suffering
c. Provide support (physical, psychological, social and spiritual) for dying patients and their families
d. Provide leadership for a team that respects patient dignity and autonomy

3. Provide timely, constructive feedback to colleagues
a. Communicate constructive feedback to other members of the health care team
b. Recognize, respond to and report impairment in colleagues or substandard care via peer review process

4. Maintain Accessibility
a. Responsibilities including but not limited to calls and pages
b. Carry out timely interactions with colleagues, patients and their designated caregivers

5. Recognize conflicts of interest
a. Recognize and manage obvious conflicts of interest, such as caring for family members and professional associates as patients
b. Maintain ethical relationships with industry
c. Recognize and manage subtler conflicts of interest

6. Demonstrate personal accountability
a. Dress and behave appropriately
b. Maintain appropriate professional relationships with patients, families and staff
c. Ensure prompt completion of clinical, administrative, and curricular tasks
d. Recognize and address personal, psychological, and physical limitations that may affect professional performance
e. Recognize the scope of his/her abilities and ask for supervision and assistance appropriately
f. Serve as a professional role model for more junior colleagues (e.g., medical students, interns)
g. Recognize the need to assist colleagues in the provision of duties

7. Practice individual patient advocacy
a. Recognize when it is necessary to advocate for individual patient needs
b. Effectively advocate for individual patient needs

8. Comply with public health policies
a. Recognize and take responsibility for situations where public health supersedes individual health (e.g. reportable infectious diseases)

9. Respect the dignity, culture, beliefs, values and opinions of the patient
a. Treat patients with dignity, civility and respect, regardless of race, culture, gender, ethnicity, age or socioeconomic status
b. Recognize and manage conflict when patient values differ from their own

10. Confidentiality
a. Maintain patient confidentiality
b. Educate and hold others accountable for patient confidentiality

11. Recognize and address disparities in health care
a. Recognize that disparities exist in health care among populations and that they may impact care of the patient
b. Embrace physicians’ role in assisting the public and policy makers in understanding and addressing causes of disparity in disease and suffering

c. Advocates for appropriate allocation of limited health care resources.

**Systems-Based Practice**

1. Works effectively within multiple health delivery systems
a. Understand unique roles and services provided by local health care delivery systems
b. Manage and coordinate care and care transitions across multiple delivery systems, including ambulatory, subacute, acute, rehabilitation, and skilled nursing.
c. Negotiate patient-centered care among multiple care providers.

2. Works effectively within an interprofessional team
a. Appreciate roles of a variety of health care providers, including, but not limited to, consultants, therapists, nurses, home care workers, pharmacists, and social workers.
b. Work effectively as a member within the interprofessional team to ensure safe patient care.
c. Consider alternative solutions provided by other teammates
d. **Demonstrate how to manage the team by utilizing the skills and coordinating the activities of interprofessional team members.**

3. Recognizes system error and advocates for system improvement
   a. Recognize health system forces that increase the risk for error including barriers to optimal patient care
   b. Identify, reflect upon, and learn from critical incidents such as near misses and preventable medical errors
   c. **Dialogue with care team members to identify risk for and prevention of medical error**
   d. **Understand mechanisms for analysis and correction of systems errors**
   e. **Demonstrate ability to understand and engage in a system level quality improvement intervention.**
   f. **Partner with other healthcare professionals to identify, propose improvement opportunities within the system.**

4. Identify forces that impact the cost of health care and advocates for cost-effective care
   a. Reflect awareness of common socio-economic barriers that impact patient care.
   b. Understand how cost-benefit analysis is applied to patient care (i.e. via principles of screening tests and the development of clinical guidelines)
   c. **Identify the role of various health care stakeholders including providers, suppliers, financiers, purchasers and consumers and their varied impact on the cost of and access to health care.**
   d. **Understand coding and reimbursement principles**

5. Practices cost-effective care
   a. Identify costs for common diagnostic or therapeutic tests
   b. Minimize unnecessary care including tests, procedures, therapies and ambulatory or hospital encounters
   c. **Demonstrate the incorporation of cost-awareness principles into standard clinical judgments and decision-making**
   d. **Demonstrate the incorporation of cost-awareness principles into complex clinical scenarios**

**GMEC Resident Supervision**

A. **Supervision of Residents**
   - Each patient must have an identifiable, appropriately-credentialed and privileged attending physician (or licensed independent practitioner as specified by each Review Committee) who is responsible and accountable for that patient’s care.
   - This information must be available to residents, faculty members, other members of the health care team, and patients.
     - **Inpatient:** Patient information sheet included in the admission packet and listed on the “white board” in each patient room
     - **Outpatient:** Provided during introduction verbally by residents and/or faculty
   - Residents and faculty members must inform patients of their respective roles in each patient’s care when providing direct patient care.
   - The program must demonstrate that the appropriate level of supervision is in place for all residents who care for patients.

B. **Methods of Supervision.**
   - Supervision may be exercised through a variety of methods.
For many aspects of patient care, the supervising physician may be a more advanced resident or fellow.

Other portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member, fellow or senior resident physician, and either on site or by means of telephonic and/or electronic modalities. Some activities require the physical presence of the supervising faculty member. In some circumstances, supervision may include post-hoc review of resident delivered care with feedback.

The program must demonstrate that the appropriate level of supervision in place for all residents is based on each resident’s level of training and ability, as well as patient complexity and acuity.

Supervision may be exercised through a variety of methods, as appropriate to the situation.

The Review Committee may specify which activities require different levels of supervision.

C. Levels of Supervision Defined

To promote oversight of resident supervision while providing for graded authority and responsibility, the program must use the following classification of supervision:

**Direct Supervision:**
- The supervising physician is physically present with the resident and patient.

**Indirect Supervision A (with direct supervision immediately available):**
- The supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide Direct Supervision.

**Indirect Supervision B (with direct supervision available):**
- 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:**
- The supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

The privilege of progressive authority and responsibility, conditional independence, and as supervisory role in patient care delegated to each resident must be assigned by the program director and faculty members.
**RRC APPROVED LICENSED INDEPENDENT PRACTITIONER SUPERVISOR** and this information must be available to the residents, faculty members, other members of the health care team and patients. (PR VI.A.2.a (1))

Each patient must have an identifiable and appropriately-credentialed and privileged attending physician (or licensed independent practitioner as specified by the applicable Review Committee) who is responsible and accountable for the patient’s care.

Information regarding licensure for attending physicians is available via a publicly available database: [http://docfinder.docboard.org/ks/df/kssearch.htm](http://docfinder.docboard.org/ks/df/kssearch.htm)

Licensure data on resident physicians is kept up to date in the University of Kansas Health System GME Office.

**VI.A.2.a) (1).(b.) Inform each patient of their respective roles in patient care, when providing direct patient care.**

This information must be available to residents, faculty members, other members of the health care team, and patients.

- **Inpatient:** Patient information sheet included in the admission packet and listed on the “white board” in each patient room. Provided during introduction verbally by residents and/or faculty.
- **Outpatient:** Communicated to patient at time of appointing scheduling. Provided during introduction verbally by residents and/or faculty.

**PGY – 1 residents must be supervised either directly or indirectly with direct supervision immediately available. Conditions and the achieved competencies under which a PGY -1 resident progresses to be supervised indirectly with direct supervision available:** (PR VI.A.2.e.(1).(a))

Guidelines for circumstances and events in which residents must communicate with their supervising faculty member are delineated in the Housestaff Manual and in the rotational goals and objectives. PGY-1 residents are supervised, either directly or indirectly with direct supervision immediately available on site, by PGY-2 or PGY-3 residents or staff members on all rotations, including night float, at all training sites. During daytime inpatient, consult, and outpatient rotations, supervision is direct and occurs by an attending physician as well as a senior resident. On night float rotation at KU Hospital, a senior resident and a hospitalist faculty attending are present on location to immediately provide direct supervision. On night float rotation at Kansas City VA Hospital, a senior resident is present on location to immediately provide direct supervision and a faculty attending is available by pager and is available to provide Direct Supervision. Residents are not responsible for nighttime coverage at the Leavenworth VA Hospital.
The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident must be assigned by the Program Director and faculty members. (PR VI.A,2,d, (1,2,3)

The program has adapted the American Board of Internal Medicine’s Milestones of Competency to delineate our overall and rotational goals and objectives. Our evaluation system provides data on the ACGME reporting milestones. This data along with review of the resident’s portfolio of work allows the Program Director and faculty members to make determinations on a resident’s ability to gain progressive authority and responsibility.

The program director must evaluate each resident’s abilities based on specific criteria, guided by the Milestones.

Faculty members functioning as supervising physicians must delegate portions of care to residents based on the needs of the patient and the skills of each resident.

Senior residents or fellows serve in a supervisory role to junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow.

RARE CIRCUMSTANCES WHEN RESIDENTS may elect to stay or return to the clinical site: (PR VI.F)

In rare circumstances, after handing off all other responsibilities, a resident, on their own initiative, may elect to remain or return to the clinical site in the following circumstances:

- to continue to provide care to a single severely ill or unstable patient;
- to attend to humanistic attention to the needs of a patient or family; or,
- to attend unique educational events.

The program monitors circumstances in which residents stay beyond scheduled periods of duty through the institutional work hours monitoring system in MedHub. The program leadership reviews the resident work hours report weekly, and residents are instructed to enter a comment in their work hours report indicating the reason for their work hours violation. In addition, the chief residents contact all residents with reported work hours violations to inquire about the cause and impact of the violation. This data is reviewed and discussed during weekly program leadership meeting, and trends are carefully sought and addressed.
<table>
<thead>
<tr>
<th>DEFINED MAXIMUM NUMBER OF CONSECUTIVE WEEKS OF NIGHT FLOAT AND MAXIMUM NUMBER OF MONTHS PER YEAR OF IN-HOUSE NIGHT FLOAT (PR VI.F. 6.)</th>
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<tbody>
<tr>
<td><strong>Maximum Frequency of In-House Night Float</strong></td>
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<tr>
<td>Residents must not be scheduled for more than six consecutive nights of night float.</td>
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<tr>
<td><strong>VI.G.7. Maximum In-House On-Call Frequency</strong></td>
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<tr>
<td>PGY-2 residents and above must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four week period).</td>
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<tr>
<td><strong>VI.G.7.a) Internal Medicine residency programs must not average in-house call over a four-week period.</strong></td>
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<tr>
<td>All call for the program occurs on a night float schedule except for Sunday night intern call on inpatient services, which is a 16-hour shift performed on a rotation about once to twice per month per intern.</td>
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<tr>
<td><strong>Program-specific guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty (PR VI.A.2.e)</strong></td>
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<tr>
<td>1. Admission to Hospital</td>
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<td>2. Transfer of patient to a higher level of care</td>
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<td>3. Clinical deterioration, especially if unexpected</td>
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<td>4. End-of-life decisions</td>
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<tr>
<td>5. Change in code status</td>
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<td>6. Red Events</td>
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<tr>
<td>7. Change in plan of care, unplanned emergent surgery or planned procedure that does not occur</td>
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<tr>
<td>8. Procedural complication</td>
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<td>9. Unexpected patient death</td>
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</table>
RED EVENTS - DEATH AND SERIOUS INJURY AND/OR NEAR MISS

- Serious blood transfusion reaction
- Contaminated drug, device or biologic
- Equipment related injury
- Falls resulting in major injury
- Fire, flame, smoke or heat during patient care
- Electric shock or burn during patient care
- Infection: Patient to patient and or visitor exposure
- Maternal/Perinatal
  - Unexpected peri-natal death
  - Unexpected infant death
  - Unexpected maternal death or serious disability
- Medication error with serious injury and/or death
- Elopement of patient lacking capacity, danger to self or others, or involuntarily admitted
- Radiation overdose
- Restraint or bedrail use causing death or serious injury
- Serious iatrogenic injury
- Unexpected deaths in ambulatory settings (excluding Emergency Department)

- Procedural and perioperative events
  - Procedure performed on wrong body part or wrong patient
  - Wrong procedure performed
  - Unexpected intraoperative/postoperative death
  - Death during elective surgery or procedure
  - Unintentionally retained foreign object
  - Wrong donor sperm or egg
- Security:
  - Disruptive behavior that causes harm or injury to patient or impedes patient care
  - Sexual assault or rape of a patient, visitor or employee
  - Infant discharged to the wrong family
  - Impersonation of a health care professional
  - Patient abduction
- Suicide/Homicide of patient, employee, visitor on health system premises campus
- Any defect that has the potential to cause harm across the health system
<table>
<thead>
<tr>
<th>LEVEL of SUPERVISION</th>
<th>ACTIVITIES /PROCEDURES (as defined by RRC &amp; Program)</th>
</tr>
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<tbody>
<tr>
<td>DIRECT</td>
<td>ACLS</td>
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<tr>
<td></td>
<td>Arterial blood draw</td>
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<td></td>
<td>Arterial line</td>
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<tr>
<td></td>
<td>Arthrocentesis</td>
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<tr>
<td></td>
<td>Bone marrow aspiration</td>
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<td>Bone marrow biopsy</td>
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<td>Bronchoscopy</td>
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<td>Cardioversion</td>
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<td>Chest tube placement</td>
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<td>Intubation, emergent</td>
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<td>Laryngeal mask airway</td>
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<td></td>
<td>Lumbar puncture</td>
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<td>Nasogastric tube placement</td>
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<td>Pap smear (until at least one performed)</td>
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<td></td>
<td>Paracentesis</td>
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<td>Thoracentesis</td>
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<tr>
<td></td>
<td>Ultrasound for central line placement</td>
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<tr>
<td>INDIRECT A (with direct supervision immediately available)</td>
<td>Electrocardiogram interpretation (preliminary interpretation)</td>
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<td></td>
<td>Periphereal IV</td>
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<td></td>
<td>Radiology interpretation (preliminary interpretation)</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>Venous blood draw</td>
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<td>Incision and drainage of an abscess</td>
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Each of the procedures below can be performed with Indirect supervision with direct supervision immediately available provided that quantitative and qualitative assessment metrics have been met AND that procedural certification supervision requirements have been updated in Medhub by the program director:

- Arterial blood draw
- Arterial line placement
<table>
<thead>
<tr>
<th>Procedure</th>
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<td>Arthrocentesis</td>
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<td>Ultrasound for central line placement</td>
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GMEC-EC APPROVAL 5/27/11  GMEC APPROVAL 6/6/11, 06/05/17
Modified 6/20/11, May 2, 2017
IM Modified 7/28/2018
IM Reviewed 6/27/2019