Pediatric Residency Education Program

Goals and Objectives of the Pediatric Curriculum and Guidelines for Supervision

2015 - 2016
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Calendar

June – Middle:
- New interns: Hospital orientation, PALS, Newborn Resuscitation, Departmental orientation, Epic training
- Transition to new Chief Resident

June – 3rd week:
- PL-1 Beach Week and first week of work for new interns
- Welcoming and Farewell Party for residents

July – 2nd week: In-Service exam for all residents

July – August: Acute Care Lecture Series
July – September: PL-2’s USMLE, Step 3

August – Boys and Girls Club Fair

August-November – Monthly resident evaluations at end of housestaff meetings (4th Thursday)

September:
- September 30: PL-2’s MUST have successfully completed USMLE Step 3
- AAP Advocacy Day, Washington, DC
- Fall meeting with mentor

October:
- ILP due prior to semi-annual meeting
- Semi-annual individual evaluation meetings for all housestaff with Dr. Waggoner-Fountain
- AAP National Meeting – Fall Session
- General Pediatric Certifying Board Exam
- Virginia Residency Fair and All Play at AAP Chapter Meeting

October-January:
- Intern Recruiting – Monday or Tuesday night dinners with housestaff
- Tuesday or Wednesday Interviews

November:
- Pediatric Resident Retreat
- Costa Rica Week
- Clinical Competency Committee meets for individual resident milestone evaluations

December:
- Holiday parties
- Semi-annual individual meeting to review CCC milestone evaluation with Dr. Waggoner-Fountain
January
- PL-3-register for ABP General Pediatrics Certifying Exam and License
- Legislative advocacy day

February:
- 2nd week: Ranking Session for Intern Applicants
- September 30th: PL-2’s MUST have successfully completed USMLE Step 3
- Completion of required Annual ACGME anonymous resident survey

March:
- March 1 – Mid-March: Match Day!
- Newborn Resuscitation and PALS retraining for rising PL-3s

March – May: PL-2s, BCLS, NRP, and PALS retraining.

April:
- April 17 – 19 McLemore Birdsong Conference

April – June:
- Semi-Annual housestaff evaluation meetings with Dr. Waggoner-Fountain
- Resident/Advisor spring meeting
- AAP Spring Session
- PL-2’s prepare CV for review

Early May:
- Clinical Competency Committee meets for individual resident milestone evaluations
- Pediatric Academic Society Meeting

May:
- UVA Children’s Hospital Research Days – 2 consecutive Thursdays
- Required annual anonymous curriculum evaluation by residents and faculty

Late May/June:
- Housestaff Appreciation Dinner for housestaff
- Semi-annual individual meeting to review CCC milestone evaluation with Dr. Waggoner-Fountain
General Goals of the Pediatric Residency Education Program

The University of Virginia Pediatric Residency Training Program is designed to train residents to be competent general pediatricians at the completion of their three years of pediatric residency training. Medicine in itself is a lifelong educational process and residency is an intense focused learning experience. The University of Virginia Pediatric Residency Training Program requires our residents to obtain competencies in the six areas listed below to the level expected of a new pediatric practitioner.

This entire document is a summary of the goals of the individual major components of the Pediatric Resident Education Program. These goals are predicated upon the broad educational objectives of the residency program, which are for pediatric residents to demonstrate the following:

I. To provide patient care (pc) that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

II. Medical knowledge (mk) about established and evolving biomedical, clinical and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

III. Practice-based learning and improvement (pbli) that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

IV. Interpersonal and communication skills (ics) that result in effective information exchange and teaming with patients, their families, and other health professionals.

V. Professionalism (pr), as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

VI. Systems-based practice (sbp), as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

The individual rotations listed here define specific knowledge, skills, goals, objectives, and attitudes required and provide educational experiences to obtain these six general competencies. More specific definitions and examples of the six core competencies are outlined on the subsequent two pages.

Linda A. Waggoner-Fountain, MD
Pediatric Program Director
In addition to the clinical and didactic expectations noted within the educational goals of the individual components of the training program, there are additional important expectations of this residency education program as follows:

- Housestaff will attend approximately 70% of the eligible Noon Conference, Grand Rounds, and Morning Report. Residents on all other services, without concurrent clinical or educational responsibilities requiring their presence elsewhere, are also expected to attend Morning Report.

- Housestaff will maintain a log of procedures which they have **successfully** performed in the New Innovations procedure log. This list should include the history number of the patient, the date, and the person who supervised the procedure. It is appropriate if you demonstrated or taught the procedure to someone else that this also be documented. This information can be entered into the New Innovations procedure log. Procedures done on animals should be clearly recorded as being done on animals. Residents will ask supervising faculty, fellows, residents or nurse practitioners to sign off on the first three procedures performed in the NICU, intermediate and newborn nurseries including intubations and line placement.

- At the end of the first year of residency, we will ask residents to select a primary course of emphasis for their studies and training and education. This will help the resident create their Individualized Learning Plan (ILP). Areas of emphasis or tracts include but are not limited to: Global Health, Child Neurology, General Pediatrics, Procedural Based Subspecialty Pediatrics, Cognitive Based Subspecialty Pediatrics, and GME Education.

- Scholarly activities as an expectation for all housestaff may be accomplished in a number of settings or circumstances as follows:
  - Participation in journal club and the research conferences of the general and subspecialty services. All residents will lead journal club at least once during residency and will be formally evaluated on this presentation.
  - Participation in clinical or other research projects sponsored by the faculty is encouraged. Individual research projects are encouraged and the housestaff may apply with appropriate faculty sponsorship for UVA Children’s Hospital Research Grants.
  - Evidence based morning report presentations scheduled with rotation. There will also be morning report presentations that will be in a CPC case format. These morning report presentations and case discussions will be formally evaluated.
  - Preparation of a Noon Conference is required of all PL-2 and PL-3 residents with formal evaluation by at least one faculty member.
  - Attendance at the annual Research Day Activities of the department is required.
  - Participation in advocacy activities as outlined in the advocacy portion of the goals and objectives and documented in ILP.
  - Annual ILP created and reviewed with program director as well as selected advisor.
- Housestaff are not allowed to moonlight and are cautioned that unapproved extramural professional activities are not covered by your malpractice insurance as provided by the medical center.

- All residents will present a case at department MMI at least once during residency and will be formally evaluated on their presentations.

- Residents are allowed five days off (M - F) that are not during an inpatient rotation for interviews. All five of these days cannot be used during a required core block elective rotation. Residents must find coverage for other responsibilities they have (ED, medallion, continuity clinic, morning report presentations, etc.). Additional days needed for interviewing must be vacation. These policies fit the regulations set out by the American Board of Pediatrics.

- Maintenance of continuity clinic patient log.

- Maintenance of duty hour log with update weekly.

- Completion of ACGME annual survey and departmental curriculum survey.
You will be evaluated semi-annually by a clinical competency committee. This committee, made up of a small group of your Teaching faculty members who will evaluate you based on the six core competencies of Patient Care, Practiced-Based Learning Improvement, Interpersonal and Communication Skills, Professionalism, and Systems Based Practice. Milestones are a means to track your improvement during your residency training. They also set the standard for a well-rounded and competent physician.

### Milestones

#### Patient Care

**PC1. Gather essential and accurate information about the patient**

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<td>Either gathers too little information, or exhaustively gathers information following a template regardless of the patient's chief complaint, with each piece of information gathered seeming as important as the next. Recalls clinical information in the order elicited, with the ability to gather, filter, prioritize, and connect pieces of information being limited by and dependent upon analytic reasoning through basic pathophysiology alone</td>
<td>Clinical experience allows linkage of signs and symptoms of a current patient to those encountered in previous patients. Still relies primarily on analytic reasoning through basic pathophysiology to gather information, but has the ability to link current findings to prior clinical encounters allows information to be filtered, prioritized, and synthesized into pertinent positives and negatives, as well as broad diagnostic categories</td>
<td>Demonstrates an advanced development of pattern recognition that leads to the creation of illness scripts, which allow information to be gathered while simultaneously filtered, prioritized, and synthesized into specific diagnostic considerations. Data gathering is driven by real-time development of a differential diagnosis early in the information-gathering process</td>
<td>Creates well-developed illness scripts that allow essential and accurate information to be gathered and precise diagnoses to be reached with ease and efficiency when presented with most pediatric problems, but still relies on analytic reasoning through basic pathophysiology to gather information when presented with complex or uncommon problems</td>
<td>Creates robust illness scripts and instance scripts (where the specific features of individual patients are remembered and used in future clinical reasoning) that lead to unconscious gathering of essential and accurate information in a targeted and efficient manner when presented with all but the most complex or rare clinical problems. These illness and instance scripts are robust enough to enable discrimination among diagnoses with subtle distinguishing features</td>
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**PC2. Organize and prioritize responsibilities to provide patient care that is safe, effective, and efficient**

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<td>Struggles to organize patient care responsibilities, leading to focusing care on individual patients rather than multiple patients; responsibilities are prioritized as a reaction to unanticipated needs that arise (those responsibilities presenting the most significant crisis at the time are given the highest priority); even small interruptions in task often lead to a prolonged or permanent break in that task to attend to the interruption, making return to initial task difficult or unlikely</td>
<td>Organizes the simultaneous care of a few patients with efficiency; occasionally prioritizes patient care responsibilities to anticipate future needs; each additional patient or interruption in work leads to notable decreases in efficiency and ability to effectively prioritize; permanent breaks in task with interruptions are less common, but prolonged breaks in task are still common</td>
<td>Organizes the simultaneous care of many patients with efficiency; routinely prioritizes patient care responsibilities to proactively anticipate future needs; additional care responsibilities lead to decreases in efficiency and ability to effectively prioritize only when patient volume is quite large or there is a perception of competing priorities; interruptions in task are prioritized and only lead to prolonged breaks in task when workload or cognitive load is high</td>
<td>Organizes patient care responsibilities to optimize efficiency; provides care to a large volume of patients with marked efficiency; patient care responsibilities are prioritized to proactively prevent those urgent and emergent issues in patient care that can be anticipated; interruptions in task lead to only brief breaks in task in most situations</td>
<td>Serves as a role model of efficiency; patient care responsibilities are prioritized to proactively prevent interruption by routine aspects of patient care that can be anticipated; unavoidable interruptions are prioritized to maximize safe and effective multitasking of responsibilities in essentially all situations</td>
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### PC3. Provide transfer of care that ensures seamless transitions

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<td>Demonstrates variability in transfer of information (content, accuracy, efficiency, and synthesis) from one patient to the next; makes frequent errors of both omission and commission in the hand-off</td>
<td>Uses a standard template for the information provided during the hand-off; is unable to deviate from that template to adapt to more complex situations; may have errors of omission or commission, particularly when clinical information is not synthesized; neither anticipates nor attends to the needs of the receiver of information</td>
<td>Adapts and applies a standardized template, relevant to individual contexts, reliably and reproducibly, with minimal errors of omission or commission; allows ample opportunity for clarification and questions; is beginning to anticipate potential issues for the transferee</td>
<td>Adapts and applies a standard template to increasingly complex situations in a broad variety of settings and disciplines; ensures open communication, whether in the provider or the receiver role, through deliberative inquiry, including read-backs, repeat-backs (provider), and clarifying questions (receivers)</td>
<td>Adapts and applies the template without error and regardless of setting or complexity; internalizes the professional responsibility aspect of hand-off communication, as evidenced by formal and explicit sharing of the conditions of transfer (e.g., time and place) and communication of those conditions to patients, families, and other members of the health care team</td>
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### PC4. Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment

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<td>Recalls and presents clinical facts in the history and physical in the order they were elicited without filtering, reorganization, or synthesis; demonstrates analytic reasoning through basic pathophysiology in diagnostic and therapeutic reasoning; often reorganizes clinical facts in the history and physical examination to help decide on clarifying tests to order rather than to develop and prioritize a differential diagnosis, often resulting in a myriad of tests and therapies and unclear management plans, since there is no unifying diagnosis</td>
<td>Focuses on features of the clinical presentation, making a unifying diagnosis elusive and leading to a continual search for new diagnostic possibilities; largely uses analytic reasoning through basic pathophysiology in diagnostic and therapeutic reasoning; often reorganizes clinical facts in the history and physical examination to help decide on clarifying tests to order rather than to develop and prioritize a differential diagnosis, often resulting in a myriad of tests and therapies and unclear management plans, since there is no unifying diagnosis</td>
<td>Abstracts and reorganizes elicited clinical findings in memory, using semantic qualifiers (such as paired opposites that are used to describe clinical information [e.g., acute and chronic]) to compare and contrast the diagnoses being considered when presenting or discussing the receiver's clinical reasoning in diagnostic and therapeutic reasoning that often results in a well-synthesized and organized assessment of the focused differential diagnosis and management plan</td>
<td>Reorganizes and stores clinical information (illness and instance scripts) that lead to early directed diagnostic hypothesis testing with subsequent history, physical examination, and tests used to confirm this initial schema; demonstrates well-established pattern recognition that leads to the ability to identify discriminating features between similar patients and to avoid premature closure; Selects therapies that are focused and based on a unifying diagnosis, resulting in an effective and efficient diagnostic work-up and management plan tailored to address the individual patient</td>
<td>Current literature does not distinguish between behaviors of proficient and expert practitioners. Expertise is not an expectation of GME training, as it requires deliberate practice over time</td>
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### PC5. Develop and carry out management plans

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<td>Develops and carries out management plans based on directives from others, whether from the health care organization or the supervising physician; is unable to adjust plans based on individual patient differences or preferences; communication about the plan is unidirectional from the practitioner to the patient and family</td>
<td>Develops and carries out management plans based on one's own theoretical knowledge and/or directives from others; can adapt plans to the individual patient, but only within the framework of one's own theoretical knowledge; is unable to focus on key information, so conclusions are often from arbitrary, poorly prioritized, and time-limited information gathering; develops management plans based on the framework of one's own assumptions and values</td>
<td>Develops and carries out management plans based on both theoretical knowledge and some experience, especially in managing common problems; follows health care institution directives as a matter of habit and good practice rather than as an externally imposed sanction; is able to more effectively and efficiently focus on key information, but still may be limited by time and convenience; begins to incorporate patients' assumptions and values into plans through more bidirectional communication</td>
<td>Develops and carries out management plans based most often on experience; effectively and efficiently focuses on key information to arrive at a plan; incorporates patients' assumptions and values through bidirectional communication with little interference from personal biases</td>
<td>Develops and carries out management plans, even for complicated or rare situations, based primarily on experience that puts theoretical knowledge into context; rapidly focuses on key information to arrive at the plan and augments that with available information or seeks new information as needed; has insight into one's own assumptions and values that allow one to filter them out and focus on the patient/family values in a bidirectional conversation about the management plan</td>
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### Medical Knowledge
MK1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems

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<td>Explains basic principles of Evidence-based Medicine (EBM), but relevance is limited by lack of clinical exposure</td>
<td>Recognizes the importance of using current information to care for patients and responds to external prompts to do so; is able to formulate questions with some difficulty, but is not yet efficient with online searching; is starting to learn critical appraisal skills</td>
<td>Able to identify knowledge gaps as learning opportunities; makes an effort to ask answerable questions on a regular basis and is becoming increasingly able to do so; understands varying levels of evidence and can utilize advanced search methods; is able to critically appraise a topic by analyzing the major outcomes, however, may need guidance in understanding the subtleties of the evidence; begins to seek and apply evidence when needed, not just when assigned to do so</td>
<td>Is increasingly self-motivated to learn more, as exhibited by regularly formulating answerable questions; incorporates use of clinical evidence in rounds and teaches fellow learners; is quite capable with advanced searching; is able to critically appraise topics and does so regularly; shares findings with others to try to improve their abilities; practices EBM because of the benefit to the patient and the desire to learn more rather than in response to external prompts</td>
<td>Teaches critical appraisal of topics to others; strives for change at the organizational level as dictated by best current information; is able to easily formulate answerable clinical questions and does so with majority of patients as a habit; is able to effectively and efficiently search and access the literature; is seen by others as a role model for practicing EBM</td>
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### Practice-Based Learning and Improvement
PBLII. Identify strengths, deficiencies, and limits in one's knowledge and expertise

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<td>The learner acknowledges external assessments, but understanding of his performance is superficial and limited to the overall grade or bottom line; has little understanding of how the performance measure relates in a meaningful way to his specific level of Knowledge, Skills and Attitudes (KSA)</td>
<td>Assessment of performance is seen as being able to do or not do the task at hand without appreciation for how well it is done and whether there is a need to improve the outcome</td>
<td>Prompts for understanding specifics of level of performance are internal and may be identified in response to uncertainty, discomfort, or tension in completing clinical duties; evidence of this stage is demonstrated by active questioning and application of knowledge in developing a rationale for care plans or in teaching activities</td>
<td>Prompted by anticipation or contemplation of potential clinical problems, the learner self-identifies gaps in KSA through reflection that assesses current KSA versus understanding of underlying basic science or pathophysiologic principles to generate new questions about limitations or mastery of KSA; evidence of this stage can be determined by the advanced nature and level of questioning or resource seeking</td>
<td>Prompted by a self-directed goal of improving the professional self, the practitioner anticipates hypothetical clinical scenarios that build on current experience and systematically addresses identified gaps to enhance the level of KSA; elaborate questioning occurs to further explore gaps and strengths</td>
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### PBLII. Identify and perform appropriate learning activities to guide personal and professional development

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<td>Sets learning activities based on readily available curricular materials, irrespective of learning style, preferences, appropriateness of activity, or any outcome measures</td>
<td>Well-defined goals are mapped to appropriate learning activities and resources based on assigned curriculum; assignment may be part of a teacher-constructed curriculum, or part of a prescribed curriculum offered by others, or sought by the learner in response to a performance gap</td>
<td>Learning resources are sought based on analysis of learning needs assessment and constructed goals, and with consideration of the nature of the learning content and method</td>
<td>Consideration of choice of activities is based on instructional methods that are known to be effective in the development of the relevant knowledge content, application of that knowledge, and development of skills or behaviors; learning takes place through collaborative interface with experts in which learning activities sought are ones that allow for constant course correction and interactive sharing of alternative perspectives and differing lenses</td>
<td>Seeking resources to learn is undertaken with high efficiency and effectiveness, with open and flexible inclusion of the influences from outside sources (including regulatory and oversight groups); fruitful pathways and resources for learning are readily shared with peers and self-assessment of learning drives further resource seeking</td>
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PBLI3. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement

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<td>Unable to gain insight from encounters due to a lack of reflection on practice; does not understand the principles of quality improvement methodology or change management; is defensive when faced with data on performance improvement opportunities within one's practice</td>
<td>Able to gain insight from reflection on individual patient encounters, but potential improvements are limited by a lack of systematic improvement strategies and team approach; is dependent upon external prompts to define improvement opportunities at the population level</td>
<td>Able to gain insight for improvement opportunities from reflection on both individual patients and populations; grasps improvement methodologies enough to apply to populations; is still reliant on external prompts to inform and prioritize improvement opportunities at the population level</td>
<td>Able to use both individual encounters and population data to drive improvement using improvement methodology; analyzes one's own data on a continuous basis, without reliance on external forces, to prioritize improvement efforts, and uses that analysis in an iterative process for improvement; is able to lead a team in improvement</td>
<td>In addition to demonstrating continuous improvement activities and appropriately utilizing quality improvement methodologies, thinks and acts systemically to try to use one's own successes to benefit other practices, systems, or populations; is open to analysis that at times requires course correction to optimize improvement</td>
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PBLI4. Incorporate formative evaluation feedback into daily practice

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<td>Has difficulty in considering others' points of view when these differ from his or her own, leading to defensiveness and inability to receive feedback and/or avoidance of feedback; demonstrates a limited incorporation of formative feedback into daily practice</td>
<td>Is dependent on external sources of feedback for improvement; is beginning to acknowledge other points of view, but reinterprets feedback in a way that serves his or her own need for praise or consequence avoidance, rather than informing a personal quest for improvement; little to no behavioral change occurs in response to feedback (e.g., listens to feedback but takes away only those messages he or she wants to hear)</td>
<td>Understands others' points of view and changes behavior to improve specific deficiencies that are noted by others (e.g., understands that the perceptions of others are important even when those perceptions are different from his or her own, (such as when a nurse interprets a response as abrupt when it was not intended to be) causing the learner to examine what prompted this perception)</td>
<td>Internal sources of feedback allow for insight into limitations and engagement in self-regulation; improves daily practice based on both external formative feedback and internal insights (e.g., is able to point out what went well and what did not go well in a given encounter, and makes positive changes in behavior as a result)</td>
<td>Demonstrates professional maturity and deep emotional commitment that lead to deliberate practice and result in the habits of continuous reflection, self-regulation, and internal feedback and that lead to continuous improvement beyond a focus solely on deficiencies</td>
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**Interpersonal and Communication Skills**

ICS1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds

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<td>Uses standard medical interview template to prompt all questions; does not vary the approach based on a patient's unique physical, cultural, socioeconomic, or situational needs; may feel intimidated or uncomfortable asking personal questions of patients</td>
<td>Uses the medical interview to establish rapport and focus on information exchange relevant to a patient's or family's primary concerns; identifies physical, cultural, psychological, and social barriers to communication, but often has difficulty managing them; begins to use non-judgmental questioning scripts in response to sensitive situations</td>
<td>Uses the interview to effectively establish rapport; is able to mitigate physical, cultural, psychological, and social barriers in most situations; verbal and non-verbal communication skills promote trust, respect, and understanding; develops scripts to approach most difficult communication scenarios</td>
<td>Uses communication to establish and maintain a therapeutic alliance; sees beyond stereotypes and works to tailor communication to the individual; a wealth of experience has led to development of scripts for the gamut of difficult communication scenarios; is able to adjust scripts ad hoc for specific encounters</td>
<td>Connects with patients and families in an authentic manner that fosters a trusting and loyal relationship; effectively educates patients, families, and the public as part of all communication; intuitively handles the gamut of difficult communication scenarios with grace and humility</td>
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ICS2. Demonstrate the insight and understanding into emotion and human response to emotion that allows one to appropriately develop and manage human interactions

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<td>Does not accurately anticipate or read others' emotions in verbal and non-verbal communication; is unaware of one's own emotional and behavioral cues and may transmit emotions in communication (e.g., anxiety, exuberance, anger) that can precipitate unintended emotional responses in others; does not effectively manage strong emotions in oneself or others</td>
<td>Begins to use past experiences to anticipate and read (in real time) the emotional responses in himself and others across a limited range of medical communication scenarios, but does not yet have the ability or insight to moderate behavior to effectively manage the emotions; strong emotions in oneself and others may still become overwhelming</td>
<td>Anticipates, reads, and reacts to emotions in real time with appropriate and professional behavior in nearly all typical medical communication scenarios, including those evoking very strong emotions; uses these abilities to gain and maintain therapeutic alliances with others</td>
<td>Perceives, understands, uses, and manages emotions in a broad range of medical communication scenarios and learns from new or unexpected emotional experiences; effectively manages own emotions appropriately in all situations; effectively and consistently uses emotions to gain and maintain therapeutic alliances with others; is perceived as a humanistic provider</td>
<td>Intuitively perceives, understands, uses, and manages emotions to improve the health and well-being of others and to foster therapeutic relationships in any and all situations; is seen as an authentic role model of humanism in medicine</td>
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Professionalism

PROF1. Humanism, compassion, integrity, and respect for others; based on the characteristics of an empathetic practitioner

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<td>Sees the patients in a &quot;we versus they&quot; framework and is detached and not sensitive to the human needs of the patient and family</td>
<td>Demonstrates compassion for patients in selected situations (e.g., tragic circumstances, such as an unexpected death), but has a pattern of conduct that demonstrates a lack of sensitivity to many of the needs of others</td>
<td>Demonstrates consistent understanding of patient and family expressed needs and a desire to meet those needs on a regular basis; is responsive in demonstrating kindness and compassion</td>
<td>Is altruistic and goes beyond responding to expressed needs of patients and families; anticipates the human needs of patients and families and works to meet those needs as part of his skills in daily practice</td>
<td>Is a proactive advocate on behalf of individual patients, families, and groups of children in need</td>
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PROF2. Professionalization: A sense of duty and accountability to patients, society, and the profession

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<td>Appears to be interested in learning pediatrics but not fully engaged and involved as a professional, which results in an observational or passive role</td>
<td>Although the learner appreciates her role in providing care and being a professional, at times has difficulty in seeing self as a professional, which may result in not taking appropriate primary responsibility</td>
<td>Demonstrates understanding and appreciation of the professional role and the gravity of being the &quot;doctor&quot; by becoming fully engaged in patient care activities; has a sense of duty; has rare lapses into behaviors that do not reflect a professional self-view</td>
<td>Has internalized and accepts full responsibility of the professional role and develops fluency with patient care and professional relationships in caring for a broad range of patients and team members</td>
<td>Extends professional role beyond the care of patients and sees self as a professional who is contributing to something larger (e.g., a community, a specialty, or the medical profession)</td>
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PROF3. Professional Conduct: High standards of ethical behavior which includes maintaining appropriate professional boundaries

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<td>Has repeated lapses in professional conduct wherein responsibility to patients, peers, and/or the program are not met. These lapses may be due to an apparent lack of insight about the professional role and expected behaviors or other conditions or causes (e.g., depression, substance use, poor health)</td>
<td>Under conditions of stress or fatigue, has documented lapses in professional conduct that lead others to remind, enforce, and resolve conflicts; may have some insight into behavior, but an inability to modify behavior when placed in stressful situations</td>
<td>Demonstrates an in-depth understanding of professionalism that allows her to help other team members and colleagues with issues of professionalism; is able to identify potential triggers, and uses this information to prevent lapses in conduct as part of her duty to help others</td>
<td>Others look to this person as a model of professional conduct; has smooth interactions with patients, families, and peers; maintains high ethical standards across settings and circumstances; has excellent emotional intelligence about human behavior and insight into self, and uses this information to promote and engage in professional behavior as well as to prevent lapses in others and self</td>
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PROF4. Self-awareness of one's own knowledge, skill, and emotional limitations that leads to appropriate help-seeking behaviors

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<td>Has a lack of insight into limitations that results in the need for help going unrecognized, sometimes resulting in unintended consequences</td>
<td>Shows concern that limitations may be seen as weaknesses that will negatively impact evaluations results in help-seeking behaviors, typically only in response to external prompts rather than internal drive</td>
<td>Recognizes limitations, but has the perception that autonomy is a key element of one's identity as a physician, and the need to emulate this behavior to belong to the profession may interfere with internal drive to engage in appropriate help-seeking behavior</td>
<td>Recognizes limitations and has matured to the stage where a personal value system of help-seeking for the sake of the patient supersedes any perceived value of physician autonomy, resulting in appropriate requests for help when needed</td>
<td>Beyond recognizing limitations, has the personal drive to learn and improve results in the habit of engaging in help-seeking behaviors and explicitly role modeling and encouraging these behaviors in residents</td>
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PROF5. Trustworthiness that makes colleagues feel secure when one is responsible for the care of patients

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<td>Has significant knowledge gaps or is unaware of knowledge gaps and demonstrates lapses in data-gathering or in follow-through of assigned tasks; may misrepresent data (for a number of reasons) or omit important data, leaving others uncertain as to the nature of the learner's truthfulness or awareness of the importance of attention to detail and accuracy; overt lack of truth-telling is assessed in a professionalism competency</td>
<td>Has a solid foundation in knowledge and skill, but is not always aware of or seeks help when confronted with limitations; demonstrates lapses in follow-up or follow-through with tasks, despite awareness of the importance of these tasks; follow-through can be partial, but limited due to inconsistency or yielding to barriers; when such barriers are experienced, no escalation occurs (such as notifying others or pursuing alternative solutions)</td>
<td>Has a solid foundation in knowledge and skill with realistic insight into limits with responsive help seeking; data-gathering is complete with consideration of anticipated patient care needs, and careful consideration of high-risk conditions first and foremost; requires little prompting for follow-up</td>
<td>Has a broad scope of knowledge and skill and assumes full responsibility for all aspects of patient care, anticipating problems and demonstrating vigilance in high-risk conditions; pursues answers to questions and communications include open, transparent expression of uncertainty and limits of knowledge</td>
<td>Same as Level 4, but any uncertainty brings about rigorous search for answers and conscientious and ongoing review of information to address the evolution of change; may seek the help of a master in addition to primary source literature</td>
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PROF6. The capacity to accept that ambiguity is part of clinical medicine and to recognize the need for and to utilize appropriate resources in dealing with uncertainty

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<td>Feels overwhelmed and inadequate when faced with uncertainty or ambiguity; communications with patients/families and development of therapeutic plan are rigid and authoritarian, with assumption that the patient can manage information and participate in decision-making; patient/family numeracy presumed; seeks only self or self-available resources to manage response to this uncertainty, resulting in a response characterized by their (individual) preexisting state of risk aversion or risk taking; does not regard patient need for hope; feels compelled to make sure that patients understand full potential for negative outcome (defensive/protective of physician)</td>
<td>Recognizes uncertainty and feels tension/pressure from not knowing or knowing with limited control of outcomes; explains situation to the patient in framework most familiar to the physician, rather than framing it with terms, graphics, or analogies familiar to the patient; seeks rules and statistics and feels compelled to transfer all information to the patient immediately, regardless of patient readiness, patient goals, and patient ability to manage information</td>
<td>Anticipates and focuses on uncertainty, looking for resolution by seeking additional information; aims to inform the patient of the more optimal outcome(s), framed by physician goals; does not manage overall balance of patient/family uncertainty with quality of life, need for hope, and ability to adhere to therapeutic plan; focuses on own risk management position for a given problem and does not suggest that more or less risk taking (different from physician's position) could be chosen; still seeks patient/parent recitation of uncertainty/morbidity as proof that patient/family understands the uncertainty; has an unresolved balance of expectations with physician expectations taking precedence</td>
<td>Anticipates that uncertainty at the time of diagnostic deliberation will be likely; uses such uncertainty or larger ambiguity as a prompt/motivation to seek information or understanding of unknown (to self or world); balances delivery of diagnosis with hope, information, and exploration of individual patient goals; works through concepts of risk versus hope using conceptual framework that includes cost (e.g., suffering, lifestyle changes, financial) versus benefit, framed by patient health care goals; expresses openness to patient position and patient uncertainty about his or her position and response</td>
<td>Is aware of and keeps own risk aversion or risk-taking position in check; seeks to understand patient/family goals for health and their capacity to achieve those goals, given the uncertain treatment options; engages in discussion with high sensitivity towards numeracy, emphasizing patient/family control of choices with initial plan development and ongoing information sharing through changes as knowledge and patient health status evolve; remains flexible and committed to engagement with the patient/family throughout the patient's illness, serving as a resource to gather information so that degree of uncertainty is minimized; openly and comfortably discusses strategies and outcomes anticipated with the patient/family, emphasizing that all plans are subject to the imperfect knowledge and state of uncertainty; balances constant revisiting of knowledge, uncertainty, and developed plans acceptance of what is unknown; transparent communication of limits of treatment plan outcomes</td>
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### Systems-Based Practice

#### SBP1. Coordinate patient care within the health care system relevant to their clinical specialty

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<td>Performs the role of medical decision-maker, developing care plans and setting goals of care independently; informs patient/family of the plan, but no written care plan is provided; makes referrals, and requests consultations and testing with little or no communication with team members or consultants; is not involved in the transition of care between settings (e.g., outpatient and inpatient, pediatric and adult); shows little or no recognition of social/educational/cultural issues affecting the patient/family</td>
<td>Begins to involve the patient/family in setting care goals and some of the decisions involved in the care plan; a written care plan is occasionally made available to the patient/family; care plan does not address key issues; has variable communication with team members and consultants regarding referrals, consultations, and testing; answers patient/family questions regarding results and recommendations; may inconsistently be involved in the transition of care between settings (e.g., outpatient and inpatient, pediatric and adult); makes some assessment of social/educational/cultural issues affecting the patient/family and applies this in interactions</td>
<td>Recognizes the responsibility to assist families in navigation of the complex health care system; frequently involves patient/family in decisions at all levels of care, setting goals, and defining care plans; frequently makes a written care plan available to the patient/family and to appropriately authorized members of the care team; care plan omits few key issues; has good communication with team members and consultants; consistently discusses results and recommendations with patient/family; is routinely involved in the transition of care between settings (e.g., outpatient and inpatient, pediatric and adult); considers social, educational and cultural issues in most care interactions</td>
<td>Actively assists families in navigating the complex health care system; has open communication, facilitating trust in the patient-physician interaction; develops goals and makes decisions jointly with the patient/family (shared-decision-making); routinely makes a written care plan available to the patient/family and to appropriately authorized members of the care team; makes a thorough care plan, addressing all key issues; facilitates care through consultation, referral, testing, monitoring, and follow-up, helping the family to interpret and act on results/recommendations; coordinates seamless transitions of care between settings (e.g., outpatient and inpatient, pediatric and adult; mental and dental health; education; housing; food security; family-to-family support); builds partnerships that foster family-centered, culturally-effective care, ensuring communication and collaboration along the continuum of care</td>
<td>Current literature does not distinguish between behaviors of proficient and expert practitioners. Expertise is not an expectation of GME training, as it requires deliberate practice over time</td>
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#### SBP2. Advocate for quality patient care and optimal patient care systems

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<td>Attends to medical needs of individual patient(s); wants to take good care of patients and takes action for individual patients' health care needs</td>
<td>Demonstrates recognition that an individual patient's issues are shared by other patients, that there are systems at play, and that there is a need for quality improvement of those systems; acts on the observed need to assess and improve quality of care</td>
<td>Acts within the defined medical role to address an issue or problem that is confronting a cohort of patients; may enlist colleagues to help with this problem</td>
<td>Actively participates in hospital-initiated quality improvement and safety actions; demonstrates a desire to have an impact beyond the hospital walls</td>
<td>Identifies and acts to begin the process of improvement projects both inside the hospital and within one's practice community</td>
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#### SBP3. Work in inter-professional teams to enhance patient safety and improve patient care quality

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<td>Seeks answers and responds to authority from only intra-professional colleagues; does not recognize other members of the interdisciplinary team as being important or making significant contributions to the team; tends to dismiss input from other professionals aside from other physicians</td>
<td>Is beginning to have an understanding of the other professionals on the team, especially their unique knowledge base, and is open to their input, however, still acquires knowledge from physician authorities to resolve conflict and provide answers in the face of ambiguity; is not dismissive of other health care professionals, but is unlikely to seek out those individuals when confronted with ambiguous situations</td>
<td>Aware of the unique contributions (knowledge, skills, and attitudes) of other health care professionals, and seeks their input for appropriate issues, and as a result, is an excellent team player</td>
<td>Same as Level 3, but an individual at this stage understands the broader connectivity of the professions and their complementary nature; recognizes that quality patient care only occurs in the context of the inter-professional team; serves as a role model for others in interdisciplinary work and is an excellent team leader</td>
<td>Current literature does not distinguish between behaviors of proficient and expert practitioners. Expertise is not an expectation of GME training, as it requires deliberate practice over time</td>
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Residents will be evaluated on their patient care, medical knowledge, their own practice-based learning and improvement, interpersonal and communication skills, professionalism and their awareness and responsiveness to a systems-based practice. A variety of forms used for documentation are to be found after this page.

Evaluation is a continuous process throughout the residency training. A formal written evaluation will follow the completion of each rotation and the completed evaluation forms are available to the residents through the Program Coordinator's Office in hard copy and electronically via the on-line New Innovations evaluation site.

Twice yearly there will be a formal review with the Program Director and/or Associate Program Director. This review will be based on results of monthly evaluations, review by the Faculty Housestaff Evaluation Committee, student evaluations, 360° evaluations, unsolicited comments, evaluations of presentations, ITE scores, direct observations.

At least twice yearly, each resident will be assessed by the residency Clinical Competency Committee (CCC) on each of the ACGME pediatric specific milestones. These assessments will be submitted to the ACGME on a semiannual basis and the PD will review each resident’s assessment with them on an individual basis.

Twice yearly, each resident will meet with their selected advisor to discuss their ILP, career plans, and anticipated needed support for upcoming six months.

The In-Training Examination of the American Board of Pediatrics, given in mid-July, is required of all residents. Each resident’s results of the ITE will be discussed with each resident individually by the Program Director.

Housestaff are encouraged to seek feedback from faculty and/or supervising housestaff midway through rotations or at any time the house officer deems appropriate.

Housestaff will be asked to provide periodic (usually monthly) anonymous written evaluations of faculty teaching effectiveness. These evaluations are batched for release every six months to help residents monitor confidentiality. These evaluations are critically important to the successful academic careers of the faculty and we strongly encourage you to provide this feedback. You will not be harmed by being frank!

Housestaff have been instructed in medical student evaluation and are to complete student evaluations on appropriate rotations.

Annually, in May, the housestaff will be asked to provide a formal anonymous evaluation of the Pediatric Residency curriculum.

Departing 3rd year residents will have an exit interview with the program director. We strongly encourage your frank assessment of your educational experience.
The curriculum committee, chaired by the Program Director, is composed of housestaff and faculty. Please use this forum to present your suggestion for changing or improving the curriculum.

Websites

ACGME:  www.acgme.org

New Innovations:  www.new-innov.com

Department website (intranet):  https://www.healthsystem.virginia.edu/intranet/childrens/

American Board of Pediatrics:  www.abp.org

American Academy of Pediatrics:  www.aap.org

Pedialink (ILP and Access to Peds in Review):  www.pedialink.org
Guidelines for Procedure Logs

Date: June 23, 2014
To: Pediatric Housestaff
From: Linda A. Waggoner-Fountain, M.D.
RE: Procedure Logs During Residency Training

I have been asked what types of procedures should be listed in your procedure logs. During your departmental orientation, you each received a small handbook from the American Board of Pediatrics (ABP) designed to assist residents in understanding the ABP Tracking and Evaluation Program. Under procedural skills, the following are direct quotes from the ABP (2014 ABP Evaluating Your Clinical Competence in Pediatrics, pages 4-5):

"Your performance of certain technical procedures should be observed, evaluated, and documented by qualified physicians. Successful mastery of these skills includes an understanding of their indications, contraindications, complications, and the ability to interpret their results. The ability to obtain informed consent and to assure appropriate pain management is essential."

The Review Committee (RC) for Pediatrics states that each resident must be able to competently perform procedures used by a pediatrician in general practice. This includes being able to describe the steps in the procedure, indications, contraindications, complications, pain management, post-procedure care, and interpretation of application results. Residents must demonstrate procedural competence by performing the following procedures:

- Bag-mask ventilation
- Bladder catheterization
- Giving immunizations
- Incision and drainage of abscess
- Neonatal endotracheal intubation
- Lumbar Puncture
- Peripheral intravenous catheter placement
- Reduction of simple dislocation
- Simple laceration repair
- Simple removal of foreign body
- Temporary splinting of fracture
- Umbilical catheter placement
- Venipuncture

All residents must complete training and maintain certification in Pediatric Advances Life Support, including simulated placement of an intraosseous line and Neonatal Resuscitation.
In addition, residents must be competent in the understanding of the indications, contraindications, and complications for the following procedures:

- Arterial line placement
- Arterial puncture
- Chest tube placement
- Circumcision
- Endotracheal intubation of non-neonates
- Thoracentesis
- Conscious sedation

With regards to how many of what procedures should be logged, some general guidelines include the following two categories:

Log each procedure throughout residency
- LP
- UAC
- UVC
- Intubation
- Conscious sedation-procedural
- Bag-mask ventilation

Log procedures until competent (usually about ten procedures)
- Venipuncture
- IV placement
- Bladder catheterization
- Pain management
- Reduction and splinting of simple dislocations/fractures
- Arterial puncture
- Giving immunizations
- Simple laceration repair
- Simple foreign body removal
- Incision and drainage of abscess

At the University of Virginia

PL.1s need to have three intubations and three line placements (UAC, UVC or peripheral arterial lines) directly observed by a faculty member, fellow, NNP or senior resident and documented in writing during the nursery rotations. If this is not completed, then we will need to create additional opportunities for you to successfully complete this requirement. This will be reviewed with your Individual Learning Plan (ILP).
Recording Your Procedures
Please record your procedures in the New Innovations procedure log. Please be sure to put in who your supervisor was for the procedure so they can comment on your competence. This email will be sent to them when you do this.

How to log on: www.new-innov.com/login
Institution login: uva
Username: first initial of your first name, followed by last name
Password: same as above, you will need to change it after logging in the first time

I strongly suggest logging all of your procedures including attendance at deliveries these for your own personal use when you request hospital privileges after you complete residency.

I strongly suggest that you document all conscious sedations you perform, at least 10 cases of patient management and at least 10 – 20 newborn deliveries each of your three years of residency. Probably recording all of the deliveries you have attended is the best.
Curriculum: Bioethics
This curriculum is under the overall supervision of Noreen Crain, MD. Dr. Crain is Director of Palliative Care Services and the Fellowship Director for Pediatrics Critical Care.

Clinical Services
During the various rotations, ethical issues are addressed both as a part of regular patient care and as scheduled conferences and didactic sessions.

1. Pediatric ICU
   Daily patient care can involve discussions of withdrawing/withholding treatment, end of life, critical care, do not resuscitate, brain death, informed consent, organ transplantation and futility issues. In addition the resident noon conference series includes discussions of ethics issues, including organ donation and neurologic criteria of brain death.

2. Neonatal ICU
   Daily patient care, teaching rounds and interdisciplinary rounds can involve discussion of delivery room resuscitation, maternal/fetal conflicts, withdrawing/withholding treatment, end of life, critical care, do not resuscitate, informed consent, caring for children with disabilities, parental decision-making and futility issues. Perinatology conferences held bimonthly include periodic discussion of maternal/fetal conflicts and genetic technologies.

3. Inpatient Wards
   Daily patient care, subspecialty rounds and teaching rounds can include discussion of informed consent, parental vs minor decision-making, DNR status, end of life issues, physician-patient relationship and obligations of confidentiality, domestic violence, child abuse, care of children with chronic disabilities and AIDS/HIV.

4. Primary Care and Subspecialty Outpatient Clinics
   House officers have opportunities to rotate through a variety of different clinics. During these clinics, issues related to adolescent decision-making, adolescent sexuality, child abuse/neglect, care of chronic disabilities, prenatal diagnosis and genetic technologies, requests for enhancement therapies, religious exemptions to immunizations and other treatments are discussed on a regular basis.

5. Continuity Clinics:
   The house officer is exposed to issues of managed care and allocation of health care resources as they care for their patient population. The lecture series regularly addresses topics including adolescent sexuality, confidentiality, and minors as decision-makers.

6. Pediatric Palliative Care Services
   The UVA Children’s Hospital has developed a Palliative Care Service in cooperation with the Department of Medicine. Dr. Noreen Crain is the Director of Pediatric Palliative Care. Joy Hylton is the primary nurse involved with the palliative care team.


Didactic Conferences
During the three years of the residency program, noon conferences and grand rounds address a variety of ethical topics.

1. Grand Rounds
   One to two Grand Rounds each year specifically cover topics in ethics. Recent topics include: Children with Special Needs, Child Abuse in Costa Rica, Socioeconomic Disparities in Preterm Birth, SSI Disability Benefits for Children, Update on the Recognition & Evaluation of Child Physical Abuse.

2. Noon Conference
   The three-year cycle of conferences includes discussions by various faculty on death and dying, requesting autopsy, hospice and palliative care:
   1. The neonatologists address delivery room resuscitation, maternal/fetal conflicts and withdrawal/withholding of treatment during their sessions.
   2. The geneticists discuss use of genetic technologies and prenatal diagnosis.
   3. The developmental pediatricians discuss doctoring children with disabilities and communicating difficult news to families.
   4. The emergency medicine physicians discuss domestic violence and nonaccidental trauma.
   5. The adolescent medicine physicians discuss adolescent sexuality, birth control, minors as decision-makers and confidentiality.
   6. The endocrinologists review the use of growth hormone and diagnosing growth hormone deficiency.
   7. Annual discussion by faculty and residents about professionalism.

A series of 4-6 conferences will be developed to cover the following issues of bioethics: allocation of health care resources, managed care, cross-cultural issues, professionalism including malpractice, research and children and religious exemption. These conferences will present various cases and involve discussion of the pertinent issues by housestaff and faculty. These conferences will be spread over the three-year cycle.

   The Acute Care series at the beginning of each academic year include talks on breaking bad news for families and physicians.

3. Morning Report
   At various times during the year, cases will be presented during morning report which will include discussion of ethical issues including end of life, treatment withdrawal/withholding and delivery room resuscitation. In addition, a regular morbidity and mortality conference reviews particular cases to discuss treatment options, critical care, organ transplantation, futility and end of life issues.

Additional Services
Ethics Consultation Service: The Medical Center has an active Ethics Consultation Service available for assistance to staff and families with ethical dilemmas, as well as for education and resource access.
1. Cost-effectiveness and resource utilization of hospital admissions are discussed and reviewed at daily (morning report) attended by residents on inpatient and subspecialty rotations. Inpatient medical records are reviewed on a daily basis by members of the utilization review staff and residents are instructed in appropriate documentation, justification for continued hospitalization, and discharge planning.

2. Quality assessment of emergency medicine documentation is audited monthly by the director of the pediatric emergency medicine department, Dr. William Woods. Written feedback is maintained for each resident during their block EM rotation.

3. Quality assessment is provided at the departmental monthly Morbidity, Mortality and Improvement Conference. Patients who have either expired or suffered complications of medical care are presented by the residents and critically reviewed by the faculty. Pathologic findings are presented and reviewed by faculty of the Department of Pathology. The discussions are led by Jonathan Swanson, M.D., Director, Pediatric Patient Safety.

4. Marcia Buck, PharmD, is a member of the pediatric faculty and attends the morning intake conference in the PICU. She provides ongoing instruction in medication usage and medication costs. Dr. Buck provides 360° evaluation of residents who rotate through the PICU.

5. Specific Programs
   a. Quality Improvement & SBPLI- Pediatric housestaff noon lecture, monthly, Dr. Swanson.
   b. Medication Costs - Pediatric housestaff noon lecture, annual, Marcia Buck, PharmD, and pharmacy staff
   c. Monthly departmental mortality, morbidity and improvement conference
   d. Annual training in “Be Safe” LEAN methods from institutional and departmental safety leadership
   e. Resident involvement in CQI processes related to patient care issues in the Battle Building General Pediatrics Clinic.
Definitions

Medical decision-making derives from decision theory. This theory offers the framework for analysis of a problem under conditions of risk or uncertainty. Patients come to a physician with an illness, a collection of symptoms (manifestations of the disease perceived by the patient and brought forth during the history taking), and signs (manifestations of a disease perceived by the physician and brought forth during the physical exam). The physician then considers all these together to diagnose the disease or to create a list of possible diseases, (the differential diagnosis). Clinicians appear to replay on three main methods to combine signs, symptoms, and data collection to medical diagnosis. These methods include pattern recognition, algorithms, and hypothetico-deductive reasoning.

Pattern recognition is a powerful and impressive tool when it works. However, the patient's signs and symptoms may show parts of patterns of two or more diseases. Occasionally the pattern of the disease might be misleading, where a patient presents with unusual signs or symptoms of a common disease. Algorithms have been utilized to help a clinician move through a series of pre-determined steps based on the patient's particular condition at each branch point. This technique can be a powerful aid to physicians when they come to a problem that they see infrequently. Algorithms need to be kept manageable, simply so that they can be followed, therefore, cannot be used for a diagnosis. The third method of diagnosis is the approach that hypothesis or the differential diagnosis may be entertained and the physician will set off to collect specific pieces of data, hoping to increase the probability of one possible diagnosis. Additional information can come from further questioning, maneuvers on the physical examination or in laboratory or imaging studies. Most commonly, clinicians use a combination of the different approaches in decision making when solving problems.

In addition to diagnosing disease, physicians must also think about a course of action and decision on treatment. The clinician makes decisions by comparing the available options, consider the probability of the events that they may lead to the outcomes that are produced. Medical decision making can provide a framework to help uncover the tradeoffs in a medical decision. The physician can provide information from different areas of the clinical literature when for example; clinical trials have not yet been performed for a specific problem. How well physicians carry out the tasks of diagnosis and selecting an action affect the well being of their patients. Medical decision-making and decision theory can strengthen the doctor-patient relationship. The physician may carefully explain the current situation and treatment options and then ask the patient to help decide what should be done. This takes into account the patient's own background and experiences in the decision tree.

Goals & Objectives

1. To understand the principles of clinical decision theory and utilize this information in order to most effectively evaluate the residents’ own management of their patients.

2. To develop diagnostic reasoning skills that promote effective information exchange with patients, families and other health professionals.

3. To formulate different methods of decision-making which includes pattern recognition, algorithms and the hypothetico-deductive method that will enhance patient care and help teach assimilation of scientific evidence.
4. To appreciate how clinical decision making enhances the doctor-patient relationship.

5. This approach to the acquisition of medical knowledge will more effectively improve the residents capacity for compassionate and appropriate health care for their patients.

Methods

1. Teach the principles of decision theory through didactic conferences.
2. Apply the principles during case conferences and chief’s conference.
3. Illustrate examples of how clinicians utilize clinical decision theory in everyday practice.

Reading List


Core Rotation: Ambulatory Pediatrics

Coordinator: Amy Wrentmore, M.D.; PCC Clinic Director

General Goals of General Pediatric Clinic Rotation

1. Provision of high quality, efficient patient care with attending physician supervision of all care.
2. Promotion of high standards of house officer teaching.
3. Support of clinical research by housestaff, faculty and others as appropriate.

Specific Educational Goals

First Year of Residency

1. Expectations
   a. Be familiar with the patient care and medical knowledge required for the management of well children, including:
      - monitoring normal growth and development
      - routine immunization schedules
      - routine screening procedures
      - anticipatory guidance
   b. Be able to diagnose and manage common outpatient problems and illnesses, including:
      - upper respiratory infections, pharyngitis and otitis media
      - gastrointestinal problems, such as diarrhea and vomiting
      - common skin problems, such as eczema and impetigo
      - common behavioral problems, such as enuresis and ADHD
      - chronic medical issues, such as asthma and obesity
   c. Develop communication/interpersonal skills and demonstrate professionalism necessary to develop effective working relationships with patients, families and colleagues.

2. Methods for achieving these goals will include:
   a. Lectures, including:
      - Ambulatory Noon Lecture series
      - Weekly Friday PCC Lectures
      - Monthly continuity clinic computerized modules
   b. Supervised patient care activities
   c. Reading
      - Bright Futures 3rd Edition
      - AAP Recommendations for the pre-participation Sports Physical
      - AAP Guidelines for evaluation of ADHD
      - AAP Recommendations for Preventive Pediatric Health Care
      - Continuity Clinic Reading List
3. Guidelines for Supervision

a. Role of the supervisory, upper level resident (teach resident): The supervisory resident should enhance their medical knowledge and participate in patient care as a clinical consultant to the interns (See Course Description for Teach Resident).

b. Role of the attending physician: The attending will be available to see patients, acting as a consultant to the junior and supervisory residents.

c. Along with the supervisory resident, the attending should oversee clinic efficiency to help teach the resident practice-based learning and improvements and systems-based practice.

d. After each patient is seen, the documentation will be sent to the appropriate supervising attending. The attending will read, comment on, and sign off on the documentation, will provide appropriate documentation for billing and medicolegal purposes, and will provide feedback to the residents about the accuracy and thoroughness of their documentation as a means of continuous practice based learning and improvement.

e. Residents will be evaluated after each rotation by the General Pediatric attendings.

Mock Codes: All residents go through intermittent mock codes in the ambulatory setting.
Community Pediatrics Rotation

Central Virginia Community Health Center (CVCHC) and Orange Pediatrics

In general, PGY-1 spend 2 weeks learning about community outreach resources. PGY-2 spend the majority of their 2 weeks seeing patients at Orange; PGY-2 also help run the fitness clinic at CVCHC twice weekly.

Orange Pediatrics – Contact Dr. Diane Pappas before start of rotation

Dr. Diane Pappas - Email: dep6b@virginia.edu
Pager: 3978

You will also need to review a DVD and a short book regarding this rotation before you begin.

CVCHC – Contact Dr. Shivaram before start of rotation. See contact info below.

CVCHC : 434-581-3271 then 0 and ask for Dr. Shivaram


Objectives:

- To increase resident understanding of community pediatrics.

- To increase resident understanding that not only family, but also many other forces (educational, cultural, spiritual, economic, environmental, political) act significantly on the health and functioning of children.

- To promote the health of all children within the context of the family, school, and community in which they live.

- To promote collaboration with the family, the school, and the community’s own resources to achieve the optimal accessibility, appropriateness, and quality of services for all children.

- To develop the skills necessary to advocate for those who lack access to care because of social, cultural, geographic, or economic conditions, or special health care needs.

Requirements:

1. Clinical duties as assigned at the Pediatrics at Orange clinic and the Central Virginia Community Health Center, Buckingham.
2. Community resource mapping project.
3. Attend Case Review, Blue Ridge Care Connection for Children (2<sup>nd</sup> and 4<sup>th</sup> Thursdays)
4. Collaborate with the advocacy intern to prepare and present to the Latino Mother’s Group (3<sup>rd</sup> Thursday).
5. Completion of readings, learning modules, and reflective writings as assigned (assignments marked with an * are required).
6. Preparation of a summary of a special needs patient in anticipation of transition to adult medical and community services.

**Week 1: Perspectives on Community Pediatrics**

*The Real Life of a Pediatrician*

By Perri Klass, MD

*The Real Life of a Pediatrician* is a candid introspective look into the professional lives of individual pediatricians. One of the great joys of community pediatrics is the opportunity to work with families and with the community over time. Think about a significant patient experience that you have had and write your own essay on the “real life.” Include your thoughts on the patient and their family, the community connections that were important to this event, and what you learned about community and pediatrics from this interaction. Please do not use real patient names (use initials or a fictitious name). Email your completed essay to Dr. Pappas by the end of your community pediatrics rotation.

Collected essays will be posted on the General Pediatrics Core Resources intranet site (currently under development and should be available soon).

*Resource Mapping*

Knowing the resources and strengths of the community in which you practice is vital to providing the very best and most complete care to your patients. You will be assigned one category (i.e. food resources for those in need) and will develop a resource list that can be shared with families describing the resources that are available in our community and how to access them. In order to make the best possible list, you will need to use many different resources (internet, agencies, churches, etc.). Be sure to include any pertinent details or insights about a resource that you may know about. Email a 1-2 page list of resources (include the name of the resource, description of the resource, address and contact information, etc.) to Dr. Pappas by the end of your community pediatrics rotation. Your resource map will be added to our General Pediatrics Core Resources intranet webpage that is under development; it will be launched soon and then will be accessible to you in every clinical setting at UVA.

*The Medical Home*

Understanding and implementing the concept of the medical home is an important component to effective pediatric care. These policy statements concisely summarize the essential elements of the medical home.

The Medical Home

AAP Policy Statement
http://aappolicy.aappublications.org/cgi/reprint/pediatrics;110/1/184

“Care Coordination in the Medical Home: Integrating Health and Related Systems of Care for Children with Special Health Care Needs”

AAP Policy Statement, Council on Children with Disabilities
http://aappolicy.aappublications.org/cgi/reprint/pediatrics;116/5/1238.pdf

**Week 2: Perspectives on Black and White**
"Locked Out"
(PBS documentary on the fall of Massive Resistance)

Massive resistance happened 50 years ago. Does this historical event still have relevance today? Why or why not? How might this event shape the perspectives of the African-American families that we care for in Virginia as regards education and health care? Think about the families that you care for; have you seen the impact and influence of Massive Resistance still resonating in our own community?

Week 3: Community Systems of Care

*Supplemental Security Income (SSI) for Children and Youth With Disabilities
AAP Policy Statement
www.pediatrics.org/cgi/doi/10.1542/peds.2009-2557

Why are the most important points that pediatricians should know about SSI? What is(are) the pediatrician’s role(s) in this system? How can this help our patients?

Push (optional reading)
By Sapphire

Although Push notes the resilience of the main character by the end of the book, this is not a story of good outcomes. Instead, it is largely a story of multiple system failures with disastrous effects on an individual child. What were these failures and how could they have been avoided? What does this story suggest for the role of the pediatrician or other health care providers?

*Welcome to Holland
http://www.our-kids.org/Archives/Holland.html

This is a wonderful essay about a parent’s perspective on the diagnosis of their child with special health care needs. The author says, “So you must go out and buy new guide books. And you must learn a whole new language. And you will meet a whole new group of people you would never have met.” Think about a patient with special health care needs that you have cared for. Who are the “whole new group of people” that the family had to learn to work with? What “language” did they have to learn? What skills and resources must you, as a pediatrician, bring to your work with these chronically ill children and their families that is different in type or degree from those you might use when dealing with acute care issues?

*Blue Ridge Care Connection for Children
Care Connection for Children is a state agency charged with providing care coordination services to children with special health care needs throughout the state of Virginia. While you are attending case review with them, find out who they serve and what sort of services that they can provide for children and their families. Do you have a patient in your continuity clinic that receives their services or that could benefit from their services? Be sure to find out how to make a referral. You will be assigned to attend at least one case review with this agency in order to better understand how they can help your patients and their families.

Blue Ridge Care Connection for Children is located in Republic Plaza at 853 West Main Street, Suite 104. Call 924-0222 if you need directions.
*Transitioning the Child With Special Health Care Needs*

Prepare a summary of a special needs patient in anticipation of transition to adult medical and community services. (Talk with Dr. Pappas about this before you start).

**Week 4: Perspectives on Advocacy**

*Social History*
While you are on this rotation, think about what are the important aspects of social history and how you can ask for this information during your encounters with patients here and in any clinical setting. Develop your own approach to taking a social history that you can use consistently as a clinician. Use the article below to help you frame your approach.

Revisiting the Social History for Child Health
Pediatrics 120;2007:e734-e738
http://www.pediatrics.org/cgi/content/full/120/3/e734

*Child Advocacy Competencies and Objectives/Child Advocacy Portfolio*
Review the child advocacy competencies and objectives that have been prepared for your residency training (http://www.medicine.virginia.edu/clinical/departments/pediatrics/special-programs/child-advocacy/resident/toolkit/competencies-and-objectives.html). Many of these goals involve community systems and developing the skills necessary to advocate for patient needs. Choose one or two goals to accomplish while you are on your community pediatrics rotation.

*Also, review the child advocacy portfolio (http://www.medicine.virginia.edu/clinical/departments/pediatrics/special-programs/child-advocacy/resident/toolkit/portfolio).* How many of these goals have you accomplished thus far in your residency? What are your plans for completing your portfolio?
Coordinator: Amy Wrentmore, M.D.

Introduction

Every pediatric program must provide adequate continuity experience for all residents to allow them the opportunity to develop an understanding of and appreciation for the longitudinal nature of general pediatric care. The residents must have weekly half-day clinics scheduled for their continuity patients. A minimum of 36 clinic weeks per year throughout the 3 years of residency is required.

The continuity experience should emphasize physical and emotional growth and development, health promotion/disease prevention, management of chronic and acute medical conditions, as well as family and environmental issues as they affect the child. The patient population should include ages from birth through young adulthood and should provide adequate variety to meet the educational objectives. This continuity experience must receive priority over other responsibilities.

Methods

Residents are scheduled to see their continuity patients in the Primary Care Center or in a satellite office (Northridge or Orange). First year residents are expected to see at least 3 patients per session, second year residents are expected to see at least 4 patients per session, and third year residents are expected to see at least 5 patients per session. Record keeping, including encounter date, patient age, and diagnosis, is mandatory to allow verification of the number of patients residents see each week. Patients may be recruited from a number of sites, including the emergency department, the newborn nursery, the wards, and the intensive care units.

In addition to direct patient care, residents are required to complete on-line Ambulatory Pediatric Care Curriculum modules which are assigned monthly.

Goals and Objectives

1. To expose the pediatric resident to the breadth and variety of children of different socio-economic backgrounds and to be sensitive to their needs.
2. To teach the resident compassionate care of children and families from different cultural settings.
3. To promote health and disease prevention through anticipatory guidance and immunization practices.
4. The wide variance of normal growth and development of children will be appreciated, and the skills will be developed to recognize the need for sub-specialty referral when indicated.
5. A critical self-appraisal and need for self-evaluation will be taught to allow the resident the ability to assimilate new information and offer improvements in patient care.
6. The resident will develop appropriate adult-learning skills and a knowledge of varied resources in order to keep up-to-date with evolving biomedical and clinical advances.
7. To teach appropriate management skills of acute and chronic medical problems.
8. The resident will develop effective communication skills which will improve understanding for the patients, families, and other health professionals.
9. To prepare the resident to recognize and implement cost-effective therapy in the context of a large health delivery system.
10. To emphasize professionalism and a commitment to adhere to responsibilities and ethical principles.
11. The PL-1 resident will recruit and care for continuity clinic patients under supervision of Pediatric faculty.
12. The PL-1 resident will progressively be given more autonomy to care for his/her patient as their experience and medical knowledge expands.
13. In addition to #11 and 12 listed above, the PL-2 resident will independently care for their patient with an increasing awareness of the child and family's needs in relation to the medical system, schools, and community. The PL-2 will care for an expanding number of patients and start to teach junior medical students rotating through the general pediatric clinic.
14. The PL-2 resident will coordinate the care of patients with acute and chronic medical problems, with appropriate guidance by faculty.
15. In addition to #11 - 14, the PL-3 resident will care for an expanding number of patients and will be a resource for teaching of medical students who rotate through our clinic.
16. The PL-3 resident will learn to complete ICD-9 and E/M codes in preparation for post-residency practice or fellowship.
17. Residents should have at least two directly observed history and physicals observed and evaluated by a supervising faculty each year. Residents will also be evaluated by their continuity clinic mentor twice a year.

**Supervision**

Direct supervision is provided by our General Pediatric faculty. The attending is actively involved in direct patient care, and other competing responsibilities will not compromise their availability for supervision and consultation during Continuity Clinic.

**Home Visit Program**

A “home visit” program allows residents to see patients in their home environment. One day per month, 3-4 residents and a supervising pediatric attending experience health care visits in the context of the child’s home.

**Summary**

The resident continuity clinic experience is a required, longitudinal experience. This clinic allows each resident the opportunity to experience a long term relationship with a panel of patients which emulates the practice of general pediatrics. Continuity Clinic is designed to prepare the pediatric resident for a career in pediatrics, whether one pursues general practice or an academic sub-specialty.

**Abbreviated Reading List**

**General Texts**


**ADHD**


Adolescents
4. Contraception and Adolescents. American Academy of Pediatrics, Committee on Adolescence. 120: 5, (2007, November); 1135-1148
5. Adolescents and Anabolic Steroids: A Subject Review. American Academy of Pediatrics, (1997); 904-908

Allergy and Asthma

Complementary Medicine
2. Effectiveness of St John’s Wort in Major Depression: A Randomized Control Trial. JAMA. 285: 15 (2001, April); 1978-1986

Anemia
1. Brungnara Carlo MD; Zurakowski David PhD; DiCanzio James MS; Boyd, Theonia MD & Platt Orah MD. Reticulocyte Hemoglobin Content to Diagnose Iron Deficiency in Children. JAMA 281:23. (1999, June); 2225-2230
3. Looker, Anne C. PhD; Dallman, Peter R. MD; Carroll, Margaret D. MS; Gunter, Elaine MT & Johnson, Clifford. Prevalence of Iron Deficiency in the United States . MSPH. 277:12, (1997, March); 973-976
Breath- Holding Spells
2. Daoud, Azhar S. FRCP, Batieha, Anwar MD, PhD, Al-Sheyyab, Mahmoud, MRCPI, Abuekteish, Faisal MRCPI, & Hijazi, Sa’ad MD, PhD Effectiveness of iron therapy on breath-holding spells. The Journal of Pediatrics. (1997, April);547- 550

Breast-Feeding
1. Duncan, Burris MD, Ey, John MD, Holberg, Catharine J. MS.c, Wright, Anne PhD, Martinez , Fernando MD & Taussig Lynn MD. Exclusive Breast- Feeding for at Least 4 Months Protects Against Otitis Media. American Academy of Pediatrics. 91:5, (1993, May); 867-872

Cholesterol

Cough
3. MMWR. Infant Deaths Associated with Cough and Cold Medications....Two States, 2005. January 12, 2007, 56 (01); 1-4

Croup
1. Klassen, Terry MD; Craig, William MD; Moher, David, MSc, Osmond, Martin H. MD, CM; Pasterkamp, Hans MD; Sutcliffe, Terry BA, Watters, Lise K. MD, &. Rowe, Peter C. MD. Nebulized Budesonide and Oral Dexamethsone for Treatment of Croup. JAMA. 279:20, (1998, May); 1629-1632

Colic

Constipation
Parker, Paul H. MD. Pediatric Constipation and Encopresis. Pediatric Annals. 29:5. (1999, May)

Dermatology
Developmental Delay

Down Syndrome

Gastroenteritis

Growth Failure:

Headaches
Stafstrom, Carl E. MD, PhD, Rostasy, Kevin MD & Minster, Anna MD. The Usefulness of Children’s Drawings in the Diagnosis of a Headache. American Academy of Pediatrics. 109:3, (2002, March); 460-472

Hearing

Hypertension
Immunizations
2. Ryan, Edward T. MD & Kain, Kevin C. MD. Primary Care: Health Advice and Immunizations for Travelers. The New England Journal of Medicine. 342:23,(2000, June);1714-1724

Influenza

Injuries/Accidents

Jaundice

Lead

Nutrition

Obesity

Obstructive Sleep Apnea
Orthopedics

Otitis Media

Pneumococcus

Pneumonia

Renal

RSV

Seizures

Sickle Cell Disease

Sleep Position/ SIDS
Sports Participation

Streptococcus

Telephone Medicine

Tics
Definitions and Classification of Tic Disorders. Arch Neurol. 50(1993, October); 1013-1016

UTI

Vision:

Well Child Topics
1. Bright Futures 3rd Edition
Developmental Pediatrics Rotation (PL-1 or PL-2)

Division Chief: Richard Stevenson, M.D.
Faculty: Drs. Susan Anderson, Kenneth Norwood, Rebecca Scharf, Valentina Intagliata, Miriam Halpern

Features
1. Assigned to various Outpatient Clinics 4 days/week
2. Other day: Continuity Clinic, reading, presentation preparation; field experiences (e.g. early intervention, CHIP, VIA, preschool, school),
3. Attendance at Tuesday Fellows’ conference, 4:30-5:30; case presentation on third Tuesday of the month.
4. No call responsibilities
5. Attend continuity clinic as scheduled

Goal
To provide the resident with experience in managing developmental and behavioral problems

Objectives
1. Resident will learn to manage common developmental and behavioral problems such as ADHD, learning problems, temper tantrums and developmental delay. (PC, MK)
2. Resident will learn how to co-manage with sub-specialists the care of children with chronic developmental disabilities, such as cerebral palsy, autism, myelomeningocele, traumatic brain injury and muscular dystrophy. (PC, SBP)
3. Resident will learn how to refer to and collaborate with community service providers such as schools, social service agencies, and early intervention providers. (SBP)
4. Residents will learn how to interpret psychological, behavioral, and educational testing. (MK, PC)
5. Residents will learn about community services through field experience. (PC, SBP)

Other Requirements
1. Schedule determined at the beginning of the year
2. No changes
3. No vacation during this rotation

Resources & References

General

**Knowledge of Child Development**


**Processes and Mechanisms of Development**

Communication Skills

Developmental-Behavioral Surveillance and Screening from Infancy Through Adolescence

Diagnostic Classification Schemas

Evaluations by Other Disciplines

Family Systems

Spectrum of Child Development and Behavior
A: Health Promotion

Feeding/Eating Behaviors
Crying

Sleep

Parenting and Discipline

Elimination

Habits

Sibling and Peer Relations
Child Care and Education

Sexual Behaviors

Spectrum of Child Development and Behavior
B: Developmental and Behavioral Symptoms and Disorders
Developmental Disabilities

Impulsive/Hyperactive or Inattentive Behavior

Negative/Antisocial Behavior

**Substance Use/Abuse**

**Emotion/Mood Difficulties**

**Sleep Problems**

**Somatic Symptoms**

**Feeding/Eating Problems**

**Elimination Problems**

**Illness-Related Adaptations**

Problems of Sexuality

Atypical Behaviors/Disordered Relationship Skills

Spectrum of Child Development and Behavior
C: Environmental Influences on Development and Behavior

Crisis and Change in the Family

Diversity in Family Constellations

Diversity in Culture and Community

Child Abuse and Neglect

Other Family/Community Influences on Child Development

Therapeutic Modalities & Services: Skills in Management

Anticipatory Guidance
2. See Section IV—General Resources and References, especially Bright Futures and the American Academy of Pediatrics guidelines for health supervision.

Counseling and Referral Skills
Behavioral Treatment Methods

Basic Psychopharmacotherapy

Care Coordination

Therapeutic Modalities & Services: Knowledge of Other Disciplinary Treatments
Core Rotation: Pediatric Emergency Medicine

Supervisor: William Woods, MD

Goals

Year One: "Quality"
Develop the fundamental skills of the practice of emergency medicine that includes but not limited to:
1. Perform an appropriate focused history and physical exam
2. Demonstrate an appropriate differential diagnosis
3. Develop and carry out basic treatment plans through admission or discharge

Year Two: "Quality and Quantity"
Develop skills in efficiency that includes but not limited to above plus:
1. Develop proficiency in multi-tasking
2. Develop and institute more advanced treatment plans
3. Develop and hone critical care skills

Year Three: "Clinical Competence"
Advance clinical competence that includes but not limited to above plus:
1. Demonstrate supervisory and teaching skills
2. Demonstrate overall clinical competence in the practice of pediatric emergency medicine

Objectives

1. Demonstrate skill in "Data Gathering" that includes but not limited to:
   - PGY1: Perform an appropriate focused history and physical exam (* PC, MK, ICS, PR)
   - PGY2: Appropriate ordering and interpretation of ancillary tests (* PC, MK, SBP)
   - PGY3: Gather essential and accurate information from all available sources (* PC, SBP)

2. Demonstrate skill in "Problem Solving" that includes but not limited to:
   - PGY1: Generate an appropriate and complete differential diagnosis for an undifferentiated patient (* PC, MK)
   - PGY2: Appropriate organization of data collection in relation to patient management decisions (* PC, MK, PBL)
   - PGY3: Generate an expanded differential diagnosis including possible atypical presentations (* PC, MK, PBL)

3. Demonstrate skill in "Patient Management" that includes but not limited to:
   - PGY1: Development of a basic treatment plan (* PC, MK, SBP)
   - PGY2: Prompt recognition and appropriate emergency stabilization of the unstable patient (*PC, MK, SBP)
   - PGY3: Institutes appropriate advanced treatment plans autonomously (* PC, MK, ICS, PR, SBP)

4. Demonstrate a "Medical Knowledge" appropriate for level of training that includes but not limited to:
   - PGY1: Demonstrates a basic fund of medical knowledge (*MK)
   - PGY2: Understands the scientific basis for their decisions (*MK, PBL)
   - PGY3: Demonstrates an advanced fund of medical knowledge (*MK)
5. Demonstrate technical proficiency in "Procedural Skills" consistent with level of training that includes but not limited to:
   - PGY1: Suturing, lumbar puncture, splinting, I/D abscess (*PC)
   - PGY2: Endotracheal intubation, direction of a medical resuscitation (*PC)
   - PGY3: Conscious sedation (*PC)

6. Demonstrate skill in "Efficiency" of care that includes but not limited to:
   - PGY1: Effectively manages 1.5 patients per hour (*PC, MK, SBP)
   - PGY2: Effectively manages 2.5 patients per hour (*PC, MK, SBP)
   - PGY3: Effectively multi-tasks and adjusts to increased patient care demands as needed (*PC, MK, SBP)

7. Demonstrate appropriate "Interpersonal and Communication Skills" that includes but not limited to:
   - PGY1: Demonstrates effective information exchange with children, their families, and professional associates (*ICS, PR)
   - PGY2: Demonstrates appropriate conflict resolution skills (*ICS, PR)
   - PGY3: Works effectively with others as a leader (*ICS, PR)

8. Demonstrate appropriate "Professionalism" skills that includes but not limited to:
   - PGY1: Introduces self to patient and/or family (*PR)
   - PGY2: Respectful of patient's privacy and confidentiality (*PR)
   - PGY3: Demonstrates respect, compassion, and integrity (*PR)

9. Demonstrate skill in proper "Documentation" that includes but not limited to:
   - PGY1: Medical record is accurate, complete, timely, and appropriate (*PC)
   - PGY2: Appropriately documents medical decision making (*PC)
   - PGY3: Documents ED course including re-evaluation of patient if applicable (*PC)

10. Demonstrate an understanding of a "Systems-Based Practice" that includes but not limited to:
    - PGY1: Understands basic resources available for care of the emergency department patient (*SBP)
    - PGY2: Utilizes the consultation process appropriately (*SBP, PC)
    - PGY3: Provides appropriate follow-up to primary care physician in order to optimize outpatient care (*SBP, PC)

11. Demonstrate an awareness of the importance of "Practice Based Learning and Improvement" that includes but not limited to:
    - PGY1: Uses appropriate information resources (i.e., texts, online web sites, etc.) for care of patient (*PBL, PC)
    - PGY2: Applies knowledge of scientific studies to care (*PBL, PC)
    - PGY3: Facilitates the learning of professional associates (*PBL, MK)

(* denotes core competency area: PC-Patient Care, MK-Medical Knowledge, ICS-Interpersonal and Communication skills, PR-Professionalism, SBP-Systems Based Practice, PBL-Practice Based Learning and Improvement).

Methods

Clinical Activities
**Year One**
The pediatric interns will do intermittent shifts in the UVA pediatric emergency department during the first clinical year. The intern is expected to evaluate and manage patients presenting to the emergency department under the direct supervision of the emergency medicine (EM) faculty. All patients should be discussed with the supervising physician before any treatment or tests are ordered, unless patient care is in jeopardy. The intern should focus on the fundamentals of pediatric emergency care including performing a focused history and physical, and developing an appropriate differential diagnosis and basic treatment plan. The interns will attend didactic conferences by emergency medicine faculty during the Acute Care Series (July and August) and then the first Wednesday of the every 4th month.

**Year Two**
Pediatric residents will rotate intermittently through the pediatric emergency department, as well as complete at least one 2 week block of night shifts. The resident is expected to evaluate and manage patients presenting to the emergency department under the direct supervision of the emergency medicine faculty. The second year resident will have more responsibility and autonomy in the ED after successful completion of their internship. Second year residents will be able to initiate management and treatment decisions before their initial discussions with their supervising physicians. The second year resident is expected to manage multiple patients of varying different acuity levels thus learning appropriate organizational and patient flow skills. The senior resident is allowed to supervise medical students rotating in the emergency department. The second year resident is expected to recognize and stabilize unstable ED patients especially arriving by ambulance.

**Year Three**
Pediatric residents will rotate through the pediatric emergency department intermittently during their third year as well as complete a one month block of day shifts. The senior resident will have more responsibility and autonomy than the second year resident in patient care decision making. The resident is still responsible for involving the ED attending physician as early as possible during the patient’s care. The senior resident is allowed to supervise medical students rotating in the emergency department. The senior resident will also assist the ED attending physician with quality assurance issues including amended radiology reports, abnormal laboratory and culture reports and patient questions and complaints. 

Note: As a minimum, residents shall be allowed 1 full day in 7 days away from the institution and free of any clinical or academic responsibilities. While on duty in the emergency department, residents may not work longer than 12 continuous hours. There must be at least an equivalent period of continuous time off between scheduled work periods. The residents should not work more than 60 scheduled hours per week seeing patients in the emergency department and no more than 72 duty hours per week.

**Recommended Reading**
Review independently
1. Journal articles provided in the pediatric emergency department
2. Pediatrics and emergency medicine texts
3. Self generated critical appraisal articles

**Evaluation**
1. Daily feedback by supervising emergency medicine faculty and/or housestaff.
2. Direct observation of patient care by faculty.
3. Formal written evaluation at end of rotation by emergency medicine faculty.
4. Annual review by program director, faculty. Emergency medicine faculty with a secondary appointment in pediatrics will provide direct verbal feedback to the pediatric program director during semi-annual resident review sessions. Sessions to be scheduled by the pediatric residency director.
Core Rotation: General Pediatrics Inpatient Service

Medical Director: Lynn McDaniel, MD
Surgical Director: Eugene McGahren, MD

**Focused Goals & Objectives**

**PL-1**
1. Gain experience managing general and subspecialty pediatric medical problems. (pc, mk, ipcs, prof)
2. Develop technical skills including IV catheter placement, lumbar punctures, venipuncture, pelvic exams, etc. when appropriate. (pc)
3. Gain experience as the patient's primary physician, coordinating their care with consult services and acting as the primary contact between the family and the medical team. (pc, mk, ipcs, sbp, prof)
4. Increase knowledge base by attending scheduled conferences (morning report, attending/chief ward rounds, noon conference, ID rounds, radiology rounds and grand rounds) as well as during informal discussions with supervising resident, chief resident, attending physician, and consultants. (pc, mk, pbli, sbp)
5. Perform initial evaluation of new admissions and transfers to the pediatric ward and develop an assessment and plan under the supervision of the supervising resident. (pc, mk)

**PL-2**
1. Gain additional experience managing general and subspecialty pediatric problems and develop greater proficiency with procedures. (pc, mk, ipcs, prof)
2. Expand knowledge base by attending scheduled conferences, discussing patients with the team, and reviewing the literature when appropriate. (mk, pbli, pc)
3. Gain experience in teaching by reviewing patients with the PL-1 and student and supervising the PL-1 in performing procedures and providing patient care. (pc, mk, ipcs)
4. Act as a pediatric consultant for other services who admit to the UVA Children’s Hospital. (pc, mk, ipcs, sbp, prof)
5. Develop supervisory and organizational skills as one of the team leaders for PL-1’s and medical students.
6. As one of the team leaders, one should help the PL-1’s develop the ability to prioritize as they learn to become independent and competent pediatricians.

**PL-3**
1. Gain additional experience managing general and subspecialty pediatric patients and develop greater proficiency with procedures. (pc, mk, ipcs, prof)
2. Expand knowledge base by attending scheduled conferences, discussing patients with the team, and reviewing the current literature. (mk, pbli, pc)
3. Gain additional experience in teaching by reviewing patients with the student and PL-1, supervising the PL-1 in performing procedures and providing patient care, providing periodic feedback to the student and PL-1, and organizing the availability of appropriate reading material for the PL-1 and student. (ipcs, pc, mk)
4. Act as a pediatric consultant for other services admitting to the UVA Children's Hospital. (pc, mk, ipcs, sbp, prof)
5. The PL-3 should continue to develop as a team leader the appropriate supervisory skills and the ability to delegate appropriate duties to the other team members.

Mock Codes: All residents go through monthly mock codes.
Core Rotation: Newborn Service, Transitional Nursery, and Neonatal Intensive Care Unit (NICU)

Medical Director, Well Newborn: Ann Kellems, M.D.
Medical Director for Newborn Services: Robert Sinkin, M.D.
Medical Director, NICU: Jonathan Swanson, M.D.

Objectives

Pediatric residents have four categories of rotations through the Newborn Service during the three years of their training. The objectives for each of these experiences are as follows:

Newborn Nursery (PL-1)

1. Understand the physiology and recognize physical findings of the normal perinatal transition.
2. Understand the pathophysiology, recognize physical findings, and learn appropriate management of common neonatal pathological conditions.
3. Develop skills in interviewing and educating parents about transitional neonatal physiology and pathology.
4. Develop knowledge and skills of neonatal resuscitation.
5. Develop knowledge and skills regarding stabilization of critically ill neonates.
6. Develop supervisory and leadership skills through overseeing activities of the Family Practice PL-1 and medical students.
7. Develop teaching skills through educating the other interns, NBN staff, and medical students, and other residents.
8. Become familiar with the most up-to-date literature and recommendations in newborn medicine.

Competencies

1. Patient Care
2. Medical Knowledge
3. Practice-Based Learning and Improvement
4. Interpersonal and Communication Skills
5. Professionalism
6. Systems-Based Practice

NICU Personnel

The NICU functions as a regional referral intensive care nursery for approximately 15,000 births per year from western and northern Virginia. Because of the acute nature of these patients' illnesses, and the regional nature of the referral system, admission and patient management procedures are somewhat different than found in other areas of the pediatric service. Specifically, a neonatologist will attend during all months in this unit; and all referral admissions (approximately 50% of NICU admissions) will be directed through the neonatology fellows or attendings. However, direct patient care will continue to be provided, organized, and supervised by house staff and neonatal nurse practitioners. This information pertains both to the NICU and the Intermediate Care Services.
A. Physicians and Nurse Practitioners

1. **Intern** (Pediatrics PL-1, Family Practice (in Intermediate Nursery) or extern.)

   This individual will be the primary physician for patients in the NICU. This physician will be expected to evaluate his/her patients, develop plans, and implement the plans, with the supervision of a PL-3 or neonatal fellow. He/she will also be expected to know details of the other patients to facilitate continuity during cross-coverage times. Specific responsibilities include:
   a. Complete an admission note in Epic within 6 hours following admission.
   b. Complete a gestational age assessment (Ballard) on each admission and assessment of sizing (i.e. SGA, AGA, or LGA).
   c. Enter at least one progress note per day for each patient. Procedure notes should also be written for line placement, intubation, etc. This would include a “called to see patient” for whom an assessment and intervention is performed.
   d. Present at morning and afternoon rounds. Presentation at morning rounds should be concise but organized according to the Epic template.
      1. Name; age
      2. Discussion of major problems and related systems. Describe recent clinical and laboratory changes to orient the group to the current status of each problem.
      3. Review of medications and lab orders.
      4. Summary of plan.
      5. Request for input from nurse, resident, and others on the health care team.
   e. Enter orders into the computerized order entry system and always inform bedside nurse that an order has been written.
   f. Communicate with consulting services
   g. Perform all procedures as appropriate and with supervision as needed. All procedures should be documented in the medical record.
   h. Communicate with parents frequently by phone and/or at bedside several times per week (daily when patient unstable).
   i. X-ray rounds - present brief (one sentence) summary with radiologic questions.
   j. Multidisciplinary Rounds (see below; ICN on Tuesday, ICU on Wednesday)
      Focus on parental involvement, problems, and discharge plans if applicable.
   k. Checkout rounds in the afternoon. Once all routine daily responsibilities are completed and notes written, a plan for overnight should be formulated and discussed with on call team.
   l. Completes discharge summary for their patients in Epic

2. **PL-2 and PL-3 Resident**

   This individual will be the primary physician for patients in the NICU and ICN and should follow the more complex patients.

   This physician will be expected to evaluate his/her patients, develop plans, and implement the plans, with the supervision of a neonatal fellow. He/she will also be expected to know details of the other patients to facilitate continuity during cross-coverage times. Specific responsibilities include:
   a. Complete an admission note in Epic within 6 hours following admission.
   b. Complete a gestational age assessment (Ballard) on each admission and assessment of sizing (i.e. SGA, AGA, or LGA).
c. Enter at least one progress note per day for each patient. Procedure notes should also be written for line placement, intubation, etc. This would include a “called to see patient” for whom an assessment and intervention is performed.

d. Present at morning and afternoon rounds. Presentation at morning rounds should be concise but organized according to the Epic template.

e. Enter orders into the computerized order entry system and always inform bedside nurse that an order has been written.

f. Communicate with consulting services.

g. Perform all procedures as appropriate and with supervision as needed. All procedures should be documented in the medical record.

h. Communicate with parents frequently by phone and/or at bedside several times per week (daily when patient unstable).

i. X-ray rounds - present brief (one sentence) summary with radiologic questions.

j. Multidisciplinary Rounds (see below; ICN on Tuesday, ICU on Wednesday)

k. Focus on parental involvement, problems, and discharge plans if applicable.

l. Checkout rounds in the afternoon. Once all routine daily responsibilities are completed and notes written, a plan for overnight should be formulated and discussed with on call team.

m. Completes discharge summary for their patients in Epic.

n. Acts as supervisor or team leader for the resident team, responsible for overseeing patient care, approving treatment plans, and discussing care issues with the fellow and attending neonatologist.

o. PL3 will assign patients to members of team with increasing complexity going to more senior residents.

p. Communicates with referring doctors, especially at discharge.

q. Teaches interns, providing literature review as time allows.

r. Notifies fellow of any admission or significant change in an infant’s condition.

s. NICU/ICN Resident Objectives

ACGME requires that the objectives and expectations of each rotation are reviewed at the beginning of the rotation.

Newborn Intensive Care Unit (PL-1)
Competencies

1. Patient Care
2. Medical Knowledge
3. Practice-Based Learning and Improvement
4. Interpersonal and Communication Skills
5. Professionalism
6. Systems-Based Practice

1. Understand the pathophysiology and physical findings associated with prematurity and learn the principles of detailed management of such conditions. (Competencies 2, 3, 4)

2. Understand the pathophysiology and physical findings of many other neonatal pathological conditions and learn the principles of detailed management of such conditions. (Competencies 2, 3, 4)

3. Learn how to function efficiently within a complex patient management team and how
to communicate effectively with other team members. (Competencies 1-6)
4. Develop knowledge and skills of neonatal resuscitation. (Competencies 1-5)
5. Learn basic principles of precise fluid, electrolyte, and nutrition management.
   (Competencies 1,2,3)
6. Learn how to perform procedures on neonates. (Competencies 1,2)
7. Learn how to communicate with parents regarding neonatal conditions of all levels of complexity. (Competencies 1, 4, 5)
8. Learn and practice appropriate neonatology ethics (Competencies 4, 5)
9. Observe and participate in complex tertiary neonatal care and learn the risk factors leading to such care and the appropriate convalescent management. (Competencies 4,6)
10. Learn how to seek out and coordinate consultative advice from various subspecialists and to appropriately implement their advice (competency 6)

Intermediate Care Nursery (PL-1)
1. Understand the pathophysiology and physical findings associated with prematurity and learn the principles of detailed management of such conditions. (Competencies 2, 3, 4.
2. Understand the pathophysiology and physical findings of many other neonatal pathological conditions and learn the principles of detailed management of such conditions. (Competencies 2, 3, 4)
3. Learn how to function efficiently within a complex patient management team and how to communicate effectively with other team members. (Competencies 1-6)
4. Develop knowledge and practice skills of neonatal resuscitation. (Competencies 1-5)
5. Learn basic principles of precise nutrition management, ongoing care of complex disorders stemming from prematurity or acute neonatal conditions. (Competencies 1,2,3)
6. Learn how to perform procedures on neonates (arterial puncture, lumbar puncture). Competencies 1,2)
7. Learn how to communicate with parents regarding neonatal conditions of all levels of complexity. (Competencies 1, 4, 5)
8. Learn and practice appropriate neonatology ethics (Competencies 4, 5)
9. Observe and participate in complex tertiary neonatal care and learn the risk factors leading to such care and the appropriate convalescent management, including long term care and risk factors to consider when caring for NICU graduates as an outpatient. (Competencies 4,6)
10. Learn how to communicate with consultants and primary care physicians who will assume care for the former NICU/ICN patient upon discharge. (Competencies 1, 4, 5)

Intermediate Care Nursery and Newborn Intensive Care Unit (PL-2)
Objectives:
1. Further improve knowledge and skills initiated during PL-1 experience.  (Competencies 1-6)
2. Develop supervisory and leadership skills through overseeing activities of the PL-1, Family Medicine residents. (Competencies 4-6)
3. Develop teaching skills through educating third year students, interns and Transitional Nursery and NICU staff, leading rounds on the Transitional Nursery service. (Competencies 1-6)
4. Learn how to seek out and coordinate consultative advice from various subspecialists and to appropriately implement their advice. (Competency 6)
Newborn Intensive Care Unit (PL-3) Elective

1. Further improve knowledge and skills initiated during PL-1 and PL-2 experience.
2. Develop supervisory and leadership skills through overseeing activities of the PL-1s, Family Medicine residents, and PL-2s. Work with neonatology fellow in management of critically ill newborns.
3. Develop teaching skills through educating 4th year students, interns and PL-2s and NICU staff.
4. Develop knowledge and skills of neonatal resuscitation.

Reading List


The NICU clinical training curriculum is designed to emphasize the fundamentals of neonatal clinical diagnosis and management through an understanding of patient care, physiology, and an appreciation for the outcomes of the patients. While on clinical service, third year pediatric residents will attend all high-risk deliveries with neonatology fellows, will be involved in resuscitations and obstetric consultations, and will perform clinical procedures. This rotation will consist of three weeks of day time learning experience and one week of night time learning experience. The third year resident will be responsible for carrying the delivery pager and occasionally provide rounding support to the resident NICU team when needed (on average 1 morning per week). The third year resident will also have the opportunity to organize one of the morning neonatal conferences. Participation in the regularly scheduled neonatology conferences will be encouraged (Multidisciplinary Care Conferences (weekly - ICN - Tuesday @ 1:30 pm; NICU – Wednesday @ 1:30 pm), Journal Club [2nd Thursday @ 1 pm], Interdisciplinary Care Conference [3rd Thursday @ noon], M&M [3rd Thursday @ 1 pm], Physiology [4th Tuesday @ 1 pm] and the Neonatal Complex Care Conference [4th Tuesday @ 3:30 pm]). Orientation to NETS, handling of transport calls and going on transport will be potential options.

3. Neonatal Nurse Practitioner

Nurse Practitioners have been members of the NICU team since 1997. They assume primary responsibility for a defined number of NICU patients. Their role also is to help the interns and residents with issues of patient management. They will be resources to you on patient management, infant disease processes, computer ordering guides, TPN, and other NICU routines.

Other responsibilities include:

a. Resource for residents and supervision for interns (especially on-call)
b. Assures timely scheduling of eye exams
c. Assists with coordination of long-term patient care issues
d. Participates in patient rounds
e. Initiates and pursues research in areas of interest in neonatology
f. Participates in nursing profession development and leadership activities
4. **Fellow**

The fellow on the clinical service will be responsible for administrative activities and coordination of patient care. Direct patient care will be provided by interns, residents and NNPs. However, the fellow will be available and should be consulted for particularly complex procedures and for major changes in patient care plans and for all new admissions. Fellows will be responsible for supervising all residents.

Other responsibilities include:

a. Coordinating all admissions and transfers.
b. Coordinating patient assignment to resident or NNP team
c. Attending all extremely high-risk deliveries (e.g. < 32 wks, known congenital anomalies, etc.).
d. Keeping Attending informed.
e. Review and screening of consults.
f. Communicating with other services (e.g. obstetrics, surgery, TCV)
g. Perinatal consults/counseling of patients in L&D
h. Assuring communication with referring physicians by self or housestaff.
i. Taking NETS calls.
j. Monitoring housestaff administrative functions (i.e. discharge planning, etc.).
k. Teaching housestaff and nurses, providing references as appropriate.
1. Take in-house call

5. **Attending**

The NICU is split into two attending services. Currently NICU Service (Blue) is covered by the primary attending. The Intermediate Service (Orange) is covered by a second attending. The attending should be notified of all new or anticipated admissions and of all significant changes in patient status.

**Reading List**

1. Newborn Nursery Orientation Handout (required for NBN.)
2. Nelson’s or Rudolph’s (paperback) Text section on newborn/perinatal medicine, most current edition (required for NBN.)
The Pediatric Intensive Care Unit is a 14 bed facility with a mixed medical and surgical patient population. All medical patients, including subspecialty patients, are admitted to the PICU service and remain the patients of the PICU attending and resident staff until their discharge from the unit. Surgical subspecialty patients are jointly managed by both services with various preferences of responsibility for order entry. All patients in the PICU are followed by the PICU housestaff and attending, regardless of the attending of record. Generally, there is a PICU fellow on service, and more than half of the nights and weekends have a fellow on call in house with the resident. The attending physician is present in the unit at all times.

Pediatrics residents do one rotation in the 2nd year and one rotation in the 3rd year in the PICU, perhaps with some night float call in the PICU while on elective. Residents from anesthesia and emergency medicine also rotate through the PICU. This presents an interesting learning opportunity for pediatrics residents to learn from peers in other programs and to take a leadership role in teaching basic pediatrics to peers.

**Goals**
1. To recognize signs and symptoms of unstable physiology and pathophysiology in infants, children and adolescents.
2. To develop a repertoire of basic stabilization and resuscitation procedures.
3. To augment knowledge base about general pediatric problems by observing them in their severe state, such as severe asthma, metabolic disease, diabetes mellitus, chronic lung disease, congenital and acquired heart disease, trauma, epilepsy, infectious disease, etc.

**Objectives**

**Patient Care PL-2**
- Complete H&P with added degrees of difficulty: parents not available initially, child is critically ill, pace is accelerated, etc.
- Perform procedures in appropriately selected patients: peripheral I.V., endotracheal intubation, central venous catheter, arterial catheter, Foley bladder catheter, thoracentesis or tube thoracostomy.
- Evaluate and interpret data from multiple sources – serial exams, labs, radiographs and other imaging, etc.
- Discuss and rehearse advanced life support in didactics, mock code scenarios, and potentially real clinical scenarios.

**Patient Care PL-3**
- Expected to have greater efficiency with challenging admissions.
- Expected to have more experience with these procedures, better success rate as first operator.
  Residents are given more opportunities to do procedures as they demonstrate interest and aptitude.
  Residents are reminded that emergent procedures may be done by the fellow or attending directly not to detract from their education, but to put patient care and safety first.
- Expected to have greater sophistication in synthesis of data into meaningful information.
- Discuss and rehearse advanced life support in didactics, mock code scenarios, and potentially real clinical scenarios.
Medical Knowledge PL-2
- Attend PICU core didactic series given by faculty or fellows.
- Attempt to make a coherent assessment and plan as part of your patient’s daily progress note. This piece of the work can be intimidating in very ill children, but the investment of time and mental energy is important for learning in all of residency.
- Describe organ system failures and attempts at organ system support that can be offered in the PICU setting.
- Become familiar with frequently used medications, their indications, safety profiles, and potential side effects. The medication list for a PICU patient is generally larger by an order of magnitude compared to patients elsewhere in the Children’s Hospital.

Medical Knowledge PL-3
- Attend PICU core didactic series given by faculty or fellows. Repetition may be beneficial, particularly if a different faculty member presents the same topic in a slightly different way.
- Expected to have greater sophistication in assessment and plan, demonstrating broader understanding of pathophysiology and prognosis.
- Expected to have leadership in offering suggestions for ventilator weaning, vasoactive agent weaning, etc. beyond “wean as tolerated.”
- Expected to have greater aptitude with polypharmacy in ICU patients.
- Completion of four ICU online cases.

Interpersonal and Communication Skills PL-2
- Participate in multidisciplinary rounds with parents present, including respectful and efficient presentations and plans.
- Work effectively and respectfully with consulting teams and referring services.
- Communicate with nurses, therapists, techs, HUCs and other staff effectively and respectfully.
- Discuss vetted plans with patients and families, taking responsibility for your patients during the day, and sharing responsibility for all the PICU patients at night.

Interpersonal and Communication Skills PL-3
- Expected to have greater efficiency on work rounds with nurses, RTs, pharmacist and parents.
- Work effectively and respectfully with consulting teams and referring services.
- Expected to demonstrate leadership in their communications with other professionals about their patients.
- Expected to demonstrate leadership and responsibility for communication about vetted plans with families.

Practice-based Learning and Improvement PL-2
- Receive feedback in real time where appropriate and provide and receive written evaluations of the experience and education in the PICU.
- Investigate questions about interesting patients or therapies. Offer learned information to the group in an appropriate setting.

Practice-based Learning and Improvement PL-3
- Receive feedback in real time where appropriate and provide and receive written evaluations of the experience and education in the PICU. PL-3 residents may have more specific objectives for their second PICU rotation in their ILP. Individualized discussion is welcomed.
- Expected to have greater efficiency with patient care, allowing more time for independent learning that is offered to the group.

Professionalism PL-2
Participate in ethically sound medical decision-making discussions regarding your patients. The complexity of patient care is often greater in the PICU than in other areas, and the outcomes of those complex and difficult decisions can be serious.

Complete your work and responsibilities according to the duty hour regulations and policies.

**Professionalism PL-3**

- Expected to have greater facility with ethical issues and clinically challenging problems.
- Complete your work and responsibilities according to the duty hour regulations and policies.

**Systems-Based Practice PL-2**

- Prioritize tasks to implement care plans for patients thoroughly and efficiently.
- Advocate for your patients professionally. The pace of events in the PICU can be overwhelming at times. Attention to detail, closed-loop communication, serial exams and thorough review of results help improve patient care and safety.

**Systems-Based Practice PL-3**

- Expected to have greater efficiency and prioritization skills.
- Expected to have greater leadership in following patients and closing the loop.
Objective

Provides an opportunity for housestaff to develop their role as teachers and educators and aid in patient care. The teaching resident will also enhance the educational program for third and fourth year medical students on both the inpatient and outpatient settings.

Methods

The teaching resident is an upper level resident (usually PL-2) who will spend the morning in the clinic and the afternoon on the wards or nurseries working with medical students about pediatrics and about the basic skills required to be an effective and efficient physician.

1. In the clinic, the teaching resident will accompany students into patient rooms to teach the particulars of pediatric history taking, physical exam, and anticipatory guidance. The resident will observe the students and provide immediate constructive feedback regarding their performance of these skills. They will then present the patient to an attending who should then be able to “check out” the patient in an expedient manner, and feel confident that the teaching resident has covered all the important details. The resident will also teach the student concise, legally appropriate documentation for chart purposes. Downtime between patients should be spent discussing basic pediatric primary care issues including, but not limited to, normal development, immunizations, anticipatory guidance, safety, and common illnesses.

2. On the inpatient ward, the resident will teach the students history taking, bedside manner, and physical diagnosis. Once parental permission is obtained, any patient may be used to help teach these skills. All patients on the ward with interesting physical findings should be seen. The resident and students are all expected to give a formal presentation (10-15 minutes) each week to cover the pathophysiology and treatment of basic pediatric inpatients problems including, but not limited to, reactive airways disease/asthma, the sepsis evaluation, fever in the neutropenic patient, seizures, diarrhea and dehydration, and child abuse. The resident is not expected to perform the afternoon ward or nursery duties when post-call.

3. The resident will read a series of articles on clinical teaching.

Supervision

The medical director of the general outpatient clinic and the residency program director are responsible for the evaluation of the teaching resident. Residents are expected to seek advice and suggestions regarding their role as “teaching resident” from the medical director.

The resident will review two of their own PowerPoint presentations or handouts with the program director during this month. The resident will master two new teaching techniques during their rotation. The program director will directly observe and assess two teaching sessions by the resident and give feedback and evaluation.
**Elective Rotation: Adolescent Medicine**

Coordinator: Nancy McLaren, MD

Adolescent Medicine Rotation for Pediatric Residents

Pediatric residents at UVA are required to do a one month rotation in Adolescent Medicine as part of their three year pediatric training. In addition to this one month of concentrated training, they also receive additional experience in caring for adolescents through their clinical experience in their continuity clinic, ER, in-patient units and subspecialty clinics. Additional didactic training is provided through the ambulatory pediatric noon lecture series which include adolescent medicine and psychology lectures, continuity clinic conferences and independent reading.

1. The coordinator for the Adolescent Rotation will be Dr. Nancy McLaren.
2. The adolescent rotation will be a one – month rotation offered to 2nd and 3rd year pediatric residents.
3. Residents will spend 4 weeks at Teen Health.
4. All faculty preceptors will review/recommend articles so that the most up to date material is offered. Readings and other curriculum materials will be put on the adolescent division web site and accessible for all.

Goals and Objectives

**Objectives**
1. Appreciation of adolescent growth and development, including puberty and psychosocial maturation.
2. Provision of health care to adolescents, supervised by an attending physician and/or a nurse practitioner skilled in adolescent medicine.
3. Awareness of the particular needs of adolescents and their families.

**Specific Expectations for Graduating Residents**

1. Ability to take a detailed psychosocial history from a teen patient.
   a. Interpersonal and communication skills that result in effective information exchange and learning with patients, their families, and other health professionals.
   b. Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
   c. Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

2. Ability to examine a teen patient including male external genitalia, inspection of female external genitalia and the pelvic examination.
   a. Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
   b. Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
3. Ability to screen for substance abuse and related problems.
   a. Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
   b. Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

4. Perform a sports physical examination for adolescents.
   a. Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

5. Provide education for adolescents and their families on sexuality, reproductive health, normal adolescent development, safe driving, substance abuse, violence at home and in the community.
   a. Systems-Based Practice as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value
   b. Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
   c. Practice-based learning and improvement that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

6. Recognize disordered eating, including obesity, evaluate and refer as needed for treatment.
   a. Systems-Based Practice as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value
   b. Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

7. Management of school failure and mental health problems in youth.
   a. Systems-Based Practice as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

8. Ability to perform psychosocial evaluation, appropriate interpretation of test results, compile data for medical diagnosis, management of health concerns and prevention of secondary disability.
   a. Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
   b. Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
   c. Interpersonal and communication skills that result in effective information exchange and learning with patients, their families, and other health professionals.
Methods

1. Supervised clinical experience in the General Pediatric Clinic and Continuity Clinic throughout the 3 years of residency.
2. Supervised clinical experience in other hospital areas where adolescents receive health care, including the ER, in-patient units, and subspecialty clinics.
3. Participation in Medical Center Hour, Ethical Rounds and/or Generalist Initiative Series
4. At least one supervised 4 week elective focused on Adolescent Medicine at one of the following sites:
   - Teen Health Center: Dyan Aretakis, NP & Dr. Nancy McLaren
   - UVA students < 21 years of age who need to be hospitalized are cared for in the pediatric ED, wards and PICU
5. Ambulatory Pediatric noon lecture series, and adolescent medicine and psychology noon lecture series
6. Continuity Clinic Conference
7. Independent reading
The spectrum of pediatric care is exceptionally broad as compared to the education in many specialties. We fully expect to educate you in the management of the most simple to the most complex medical problems in pediatrics. We also expect you to gain an understanding of the social, ethical, economic, and organizational issues encountered by the pediatrician in practice, whatever that setting may be.

Pediatricians have always been advocates, not only for the health, but for the welfare of children locally, nationally and internationally, and we expect housestaff to learn effective advocacy.

Finally, the education program is relatively brief in the scheme of one’s professional career, and for most pediatricians represents the last structured experience one will have. It is essential and thus a critical expectation that housestaff will learn how to learn.

The following curricula are designed to meet those special needs and special expectations we have of all pediatricians. Your attendance and participation in the sessions as described by the curricula should be given the same importance you would give to learning about pediatric resuscitation, sepsis, or the elements of well child care.

6.97 GOAL: Pediatric Competencies (Child Advocacy)
Demonstrate high standards of professional competence, knowledge, skill, and involvement in activities necessary to effectively advocate for the health and well-being of children.

6.97.1 : Competency 1: Patient Care
Provide family-centered patient care that addresses the health and development of the child within the context of the family and available resources (including educational, other health professional, state/federal programs, available community resources, etc.) necessary for the effective promotion of health.

6.97.1.1 : Demonstrate a commitment to acting in the overall best interest of the whole patient and his/her optimal functional status, despite competing time, fiscal, or service constraints.

6.97.1.2 : Demonstrate a willingness to advocate for children and their families.

6.97.2 : Competency 2: Medical Knowledge
Understand the scope of established and evolving policies, systems, and resources that can be used by the pediatrician to advocate for the health and well-being of children on an individual, community, state, and national level and apply this knowledge.

6.97.2.1 : Demonstrate a commitment to acquiring the knowledge needed to advocate for the health and well-being of children.

6.97.2.2 : Explain why children need child advocates (e.g. children cannot vote, lobby, or speak for themselves).
6.97.2.3 Define the role of a child advocate and describe ways in which a pediatrician can advocate for children.

6.97.2.4 Discuss how the American Academy of Pediatrics advocates for children (e.g., the AAP’s federal and state legislative activities and CATCH program). Identify other regional, national, and international child advocacy organizations (e.g., Children’s Defense Fund, Mothers Against Drunk Driving, Alliance for Child Survival) and describe how to obtain more information from them.

6.97.2.5 Describe several major public health issues affecting children that are being considered by the local, state, or federal government (e.g., hand gun control, children’s health insurance, smoking cessation, helmet use, abduction surveillance systems). Identify the key elements of the position of for and against each issue and the proponents and opponents, and discuss how the pediatrician might become involved.

6.97.2.7 Discuss barriers to health and health care for children in one’s own community and some strategies to overcome these, including action the pediatrician can take, what the role of local and national government agencies should be, and community resources that are available to lessen or overcome the barriers.

6.97.2.8 Demonstrate a working knowledge of non-medical systems that influence and direct care for children, including the criminal justice, child protection, and educational systems.

6.97.2.9 Know and/or access community resources efficiently and appropriately to the care of patients.

6.97.2.10 Advocate with other medical, social or community services to address the patient's and family's problems and needs.

6.97.2.11 Understand Special Education systems and the basis for those systems.

   1. Describe the legal basis for adaptations in schools for children with special health care needs, including the Americans with Disabilities Acts (ADA) and the Individuals with Disabilities Education Act (IDEA).

   2. Give examples of classroom modifications that can be extended to children under Section 504 of the Rehabilitation Act.

   3. Assist families of children with special health care needs in accessing services through their schools, including physical, speech and occupational therapies.

   4. Assist families of children with suspected or known developmental needs in accessing evaluation and special education services from their schools.

   5. Understand the process by which schools determine appropriate services for children, including development of an Individualized Education Plan (IEP 3-22 yr), an Individualized Family Service Plan (IFSP birth-3 yr), and a 504 plan.

6.97.2.12 List local resources and support groups for children and families with social, legal, educational, or special health care needs.
6.97.2.13: Describe the policy and advocacy efforts of the AAP, the APA, and other groups that speak on behalf of children with special health care needs (e.g., the medical home model).

6.97.2.14: Understand the history and the tradition of advocacy that has shaped the role of the pediatrician within our system.

6.97.3: Competency 3: Interpersonal Skills and Communication
Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.

6.97.3.1: Communicate effectively with community agencies, school personnel, community groups, other health professionals, and child advocates to create and sustain information exchange and teamwork.

6.97.3.2: Incorporate into routine practice the ability to:

1. Gather important data on the psychosocial, environmental, economic, and medical issues that relate to a child’s health (e.g., does the family have health insurance, enough food, a place to live, adequate resources for basic needs, etc.).
2. Question caregivers about whether the patient has a medical home.
3. Explain in terminology the caregiver can comprehend the importance of a medical home to the child’s health.
4. Facilitate the family’s access to regular continuity of care.
5. Discuss and explore problems with various culturally diverse populations.
6. Explain how to access appropriate resources using language that is both culturally appropriate and on the appropriate literacy level of the caretaker and/or patient.

6.97.3.3: Collaborate with community based organizations, schools, and/or legislators to address important health problems affecting children.

6.97.3.4: Identify and communicate (through personal email, fax, phone call, or visit) with a state or federal legislator on an issue affecting children’s health.

6.97.3.5: Speak effectively about child health matters to families and community groups and participate in local child advocacy activities.

6.97.4: Competency 4: Practice-based Learning and Improvement
Demonstrate knowledge, skills and attitudes needed for continuous self-assessment to investigate, evaluate, and improve one's child advocacy skills.

6.97.4.1: Establish an individual learning plan, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.

6.97.5: Competency 5: Professionalism
Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity.

6.97.5.1: Demonstrate a commitment to professional behavior in interactions with community agencies and groups, other child advocates, school personnel, and other health professionals.
6.97.6 : Competency 6: Systems-based Practice.
Understand how to practice high-quality health care and advocate for patients within the context of the health care system.

6.97.6.1: Identify key aspects of health care systems and resources (e.g., public and private insurance, state and federal agencies) as they apply to patients, such as the role of the primary care provider and consultant in advocating for the health and well-being of children.

6.97.6.2: Recognize and advocate for families who need assistance to deal with system complexities, such as lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.

6.97.6.3: Identify specific ways in which physicians can participate in the legislative process to create or improve public programs for children.

6.97.6.4: Collaborate with families and communities to provide care coordination in a medical home for children where the family is recognized as the principal caregiver and center of strength and support for the child; the family is also recognized as the expert in their child’s care and youth as experts in their own care.

6.97.6.5: Value the roles of community resources in providing services for children and families.

6.97.6.6: Identify agencies that provide health-related services to children in their homes or schools, including early intervention programs, hospice, and home health aides.

6.97.6.7: Identify agencies and resources that provide mental health services to children.

6.97.6.8: Identify resources available to children and families with special needs (e.g., case management services, social work services, services for homeless, migrant, pregnant, or disabled children).

6.97.6.9: Identify and work collaboratively with a variety of community resources when providing care to families in need. For at least one patient, coordinate care among several different local community agencies.

6.97.6.10: Outline the history of health care in the U.S., including the development of Medicare, Medicaid, and managed care.

6.97.6.11: Summarize the main functions of the major federal health programs that affect children (e.g., ESPDT, WIC, VFC, VAERS).

6.97.6.12: Identify a child who is currently uninsured and assist his or her family/caregiver with accessing appropriate resources for insurance enrollment.

6.97.6.13: Identify a family with social/legal needs and make the appropriate social work or legal aid referral.

6.97.6.14: Discuss financial needs and limitations with patients in a respectful, sensitive, and confidential manner.

6.97.6.15: Discuss, in general terms, the services of the state and local health department, e.g., family planning, newborn screening, lead screening and abatement, oral health promotion. Describe services
available to patients and families, how to access services, and collaborate with these agencies as opportunities arise in practice.

6.97.6.16: Discuss, in general terms, the advocacy role and resources of the American Academy of Pediatrics at the state and federal level.

6.97.6.17: Discuss the role of the Child Health Advocacy Program and describe the types of problems that they can assist families with in our health system.

Welcome to the University of Virginia! I am glad that you are here and want to take this opportunity to welcome you and to introduce you to our child advocacy program. At the University of Virginia, advocating for our patients – whether on an individual basis or within the community or to the legislature – is an integral part of patient care and our residency training program.

**Resources**

We have many resources and opportunities available to you to facilitate your growth and development as a child advocate:

1. **Child Advocacy Web Page.** Here you will find many useful resources, service opportunities, funding opportunities, conferences, suggested readings, legislative information, etc. Visit often, as I try to keep it updated regularly! And, if you have information that should be posted, please let me know! [http://www.healthsystem.virginia.edu/Internet/childadvocacy/](http://www.healthsystem.virginia.edu/Internet/childadvocacy/)

2. **Child Advocacy Code Card.** On the webpage, there is an advocacy code card containing important contact information for community resources.

3. **Nancy Walton Pugh Child Advocacy Fund.** Funds are available to support resident advocacy projects and education. Details are on the webpage.

4. **Child Advocacy Elective.** Residents can fashion their own child advocacy elective. Details are on the webpage.

5. **Intern Advocacy Project.** Each fall, the intern class chooses a group project to work on together.

6. **Child Health Advocacy Program.** We have a unique partnership with the UVA Law School and the local legal aid office to provide services to families with problems in the areas of public benefits, housing conditions, and special education services. Talk to Greg Nelsen, clinic social worker, or see the website for details on how to make a referral to help your patient families.

7. **Advocacy Morning Report.** Ideas for topics can be found on the website, but the possibilities are endless and this is a great opportunity to be creative when your time comes to present!

**Opportunities**

There are many advocacy opportunities coming up soon. Please mark your calendars and plan to attend!
1. **Pediatric Community Resource Fair.** Community agencies will be on hand to share information from 11-2 in Jordan Hall. Lunch will be provided and those who complete a “Community Resource Passport” will be eligible for some wonderful door prizes!

2. **VA General Assembly Day for Pediatric Residents and Fellows.** On Thursday, January 28, 2011, residents, fellows, and practicing pediatricians from throughout VA will come to Richmond and learn first-hand about legislative advocacy and how to speak up for children’s health. Mark your calendars now and plan to attend. See the child advocacy website for details.

If you have ideas or projects in mind that you would like to talk about or want to become involved in the community, please let me know. I am always available to help you further your ideas!

My office is located in the Private Clinic Building, Pediatric Admin. Suite, Room 3608. Feel free to contact me by email ([dep6b@virginia.edu](mailto:dep6b@virginia.edu)) to set up a time to talk or stop by my office (I am usually on campus on Wednesdays, Thursdays, and Fridays). I look forward to meeting each of you and working with you as you move through your residency training!
Elective Rotation: Allergy & Clinical Immunology

Coordinators: Drs. Peter Heymann and Julia Wisniewski

Residents in their second and third year of training may choose a 2-4 week elective in allergy and clinical immunology.

Exposure to patients with primary and secondary immune deficiencies occurs under the direction of Dr. Wisniewski. Residents see hospitalized patients with immune disorders in consultation with Dr. Wisniewski.

Exposure to patients referred for allergy evaluations occurs predominantly in the ambulatory patient setting. Residents join Dr. Heymann at Northridge in the Pediatric Allergy Clinic (3rd floor down the hall from Northridge Pediatrics) on Wednesday. Allergy consultations on the in-patient service (approximately 3-5 per month) are seen together with fellows training in allergy and immunology who work together with Dr. Heymann. During the allergy elective, residents gain first-hand experience seeing children referred for asthma, allergic rhinitis, allergic conjunctivitis, recurrent ear and sinus infections, atopic dermatitis, immediate hypersensitivity to food allergens, insect venom allergens, and drug allergens. Children with chronic urticaria are also seen in this clinic.

An appreciation for the evaluation and diagnosis of allergy in infants and school-aged children is acquired during the allergy rotation. Residents learn about the development of immediate hypersensitivity disorders in childhood including sensitization to food allergens in infancy followed by sensitization to common aeroallergens during the toddler and school-age years. The developmental approach to skin testing and/or measurements of IgE antibody in serum is emphasized along with the interpretation of results with respect to the manifestations of allergic disease. The importance of defining a child's allergic profile is taught with emphasis on how this information enhances recommendations about the use of medications, allergen avoidance, and immunotherapy. The use of screening tests (total IgE levels and assessments of eosinophils in nasal secretions and peripheral blood) is also taught. Instruction in the interpretation of basic lung function tests (peak flows, spirometry and expired nitric oxide [eNO]) is reviewed during the elective.

Supervision

Supervision is provided by Drs. Wisniewski and Heymann who review all resident evaluations of patients seen in consultation. Approximately 3 to 4 patients are seen by residents each clinic. Residents who spend four weeks in the elective will also present an allergy and immunology topic at morning report.
Elective Rotation: Pediatric Anesthesia

Coordinator: Terrance A. Yemen, MD

Objectives

1. Residents are to develop an understanding of the needs and care of the pediatric surgical patient in the operating room setting.
2. Residents are to develop an understanding of the perioperative anesthetic care of these children including:
   - pre-operative assessment
   - the use of general and local anesthetic agents
   - the assessment and management of the pediatric airway
   - concepts in acquiring and managing venous and arterial access
   - common operative fluid management and resuscitation techniques
   - post-operative airway management and complications
   - management of postoperative pain and nausea/vomiting

Methods

The resident on Pediatric Anesthesia works in the surgical suites with the pediatric anesthesiologist and anesthesia residents covering the pediatric operating rooms. The residents participate in the preoperative, operative, and postoperative management of pediatric patients undergoing surgery.

Supervision

Residents are directly supervised by the attending anesthesiologist for all intra-operative care. Residents will work in conjunction with the pediatric anesthesiology resident both in the operating room and in perioperative facilities.

Other Information

1. Residents attend all scheduled pediatric conferences during their anesthesia rotation. They are not expected to attend anesthesia conferences.
2. Residents will provide night call coverage in other areas during their rotation but are not expected to provide night call for anesthesia.
The cardiology division has redesigned the cardiology elective experience to have an ambulatory focus. The pediatric resident on the cardiology elective will not participate in the care of inpatients other than consultations from other services.

The elective will now focus on the following:

1. **Outpatient Clinics**
   Monday Afternoon, Tuesday all day (some field clinics outside UVA and some Afternoon EP clinics at UVA with Dr. McDaniel), Wednesday afternoon, Thursday afternoon and Friday morning

2. **Inpatient Consults**
   This will focus on seeing newborns for murmurs, cyanosis etc, pts with Kawasaki's, r/o sbe and other inpatient consults.

3. **Preop Work-up in Clinic**
   Examining patients before surgery and reviewing the data is an excellent way to learn CHD.

4. **Conferences**
   Monday noon echo conference; Wednesday 9 am surgery conference, Wednesday noon cath conference (with Lunch), monthly M&M conference the first Friday at 7am.

5. **Other things:** Resident will have the opportunity to spend some time in the Cath lab with Dr., Hainstock, spend some time in the EP lab with Dr. McDaniel and spend some time in the OR observing surgery.

**Pediatric Cardiology Elective Schedule**

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Location/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>8:00am - 12:00pm</td>
<td>Reading or inpt consults or preops</td>
</tr>
<tr>
<td></td>
<td>12:00pm-1:00pm</td>
<td>Echo conference- 4th fl New Expansion</td>
</tr>
<tr>
<td></td>
<td>1:00pm - 5:00pm</td>
<td>Pediatric Cardiology Clinic - 4th fl, PCC</td>
</tr>
<tr>
<td>Tuesday</td>
<td>All Day</td>
<td>EP Clinic - 4th fl, PCC or Field Clinic</td>
</tr>
<tr>
<td></td>
<td>1st and 3rd Tuesdays</td>
<td>Field clinic at Winchester Hospital. We leave KCRC Parking lot at 7:45am and return approx. 5:30pm.</td>
</tr>
<tr>
<td></td>
<td>2nd and 4th Tuesdays</td>
<td>Field clinic in Lynchburg. We leave KCRC Parking lot at 8:00am and return approx. 3:30pm.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>9:00am - 10:00am</td>
<td>Surgery Conference - Camp Heart Auditorium</td>
</tr>
<tr>
<td></td>
<td>12:00pm - 1:00pm</td>
<td>Cath Conference - 4th fl, New Expansion</td>
</tr>
<tr>
<td></td>
<td>1:00pm - 5:00pm</td>
<td>Pediatric Cardiology Clinic - 4th fl, Primary Care</td>
</tr>
<tr>
<td>Thursday</td>
<td>8:00am - 9:00am</td>
<td>Pediatric Grand Rounds - Camp Heart Auditorium</td>
</tr>
<tr>
<td></td>
<td>9:00am - 11:00am</td>
<td>Reading or inpt consults or preops</td>
</tr>
<tr>
<td></td>
<td>11:00am - 12:00pm</td>
<td>Teaching Rounds with Dr. Carpenter - OMS, Rm. 3744</td>
</tr>
</tbody>
</table>
Residents interested in inpatient cardiology have the option of attending CICU rounds at 0700.

**Learning Objectives - for General Pediatricians in Pediatric Cardiology to be accomplished during Residency:**
1. Evaluation of a child with a murmur
2. Evaluation of pediatric ECGs
3. Evaluation of syncope
4. Evaluation of chest pain
5. Recognition and treatment of Kawasaki disease
6. Recognition and treatment of endocarditis
7. Recognition and treatment of congestive heart failure
8. Evaluation of acute rheumatic fever
9. Recognition of common pediatric arrhythmias
10. Approach to cyanotic heart disease
11. Approach to left to right shunts
12. Approach to left to right obstructive lesions
13. Understand common operations for congenital heart disease

**Technical skills:**
1. Auscultation of heart
2. Assessment of cardiac function
3. Interpretation of ECG

Obviously this is a comprehensive list which cannot be completely covered in a one month subspecialty elective (otherwise we would not need Pediatric Cardiologists), but hopefully through patient exposure and reading the majority of these objectives can be at least reviewed during the elective.

**References**
1. Park, M.K. Pediatric Cardiology for Practitioners, Year Book Medical Publishers. Available in Pediatric or Health Sciences Library. Check out from Lisa Swope (924-9122).

For more detailed information:

4. Allen, H.D., Gutgesell, H.P., Clark, E.B., Driscoll, D.J. Moss and Adams’ Heart Disease in Infants, Children, and Adolescents, Lippincott Williams & Wilkins. Volume One and Two. Available in Pediatric or Health Sciences Library.
GOALS AND OBJECTIVES:

The primary goal of this rotation is to provide a carefully supervised outpatient experience where the resident observes and participates with child psychiatry fellows in evaluations and treatments including psychoactive medications to selected children and adolescents with common psychiatric illnesses. Residents will also participate in our telemedicine clinics. All work will be closely supervised by our faculty.

CORE COMPETENCY
Practice-Based Learning and Improvement

Definition
Practice-based learning and improvement in child and adolescent psychiatry encompasses a broad range of processes by which the physician assesses his/her practice and practice patterns to progressively improve their skills and knowledge, elucidate and remediate deficiencies, and strive to adhere to established >best practices= and professional practice parameters and guidelines.

Main Outcome
By the end of the rotation the resident should have the skills to effectively evaluate and improve their clinical practice patterns.

I. Knowledge: The resident should be able to recognize knowledge gaps in the following broad topic areas:
   A. Child development (normal and abnormal)
   B. Child and adolescent psychopathology
   C. Evaluation and diagnostic procedures
   D. Treatment modalities (biological, behavioral, parent training, etc)
   E. Biological and clinical information base
   F. Child advocacy and ethical issues

II. Skills: The resident should demonstrate the ability to:
   A. Acquire and discuss their child and adolescent psychiatry knowledge in terms of professional practice parameters and guidelines.
   B. Apply the relevant knowledge effectively in clinical situations.
   C. Utilize and integrate the relevant scientific knowledge from a variety of sources (electronic data bases, scientific articles, lecture and seminar series, one=s own clinical experiences) in diagnostic and clinical decision making.
   D. Examine elements of one=s own practice for knowledge gaps and variances from established >best practices=.

III. Attitudes: The resident will demonstrate commitment to practiced-based learning by:
   A. Recognizing the need for a commitment to life long learning, participation in
continuing medical education, and continuing practice pattern monitoring.

B. Recognizing that scientific knowledge is not static, but ever changing as new information is added and integrated into the existing database.

C. Demonstrating a willingness to utilize the scientific literature to gather the information needed to keep one’s practice patterns up to date and with in ‘best practices’.

IV. Assessment: The following tools and measures will be utilized and results reviewed with the resident by the training director:

A. Rotation evaluation by faculty

CORE COMPETENCY
Professionalism and Ethical Behavior

Definition
Professionalism and ethical behavior encompasses the resident’s commitment to professional standards and responsibilities to provide ethical, compassionate, respectful, and accountable patient care in the context of pursuing excellence in clinical management that is responsive to the needs of patients and society. This also includes a commitment to ongoing professional development and education, putting patient’s needs ahead of one’s own interests, demonstrating sensitivity to diverse cultural and demographic populations, adhering to ethical business practices, and being knowledgeable about the ethical and medical-legal issues found in everyday clinical practice.

Main Outcome
By the end of the rotation the resident should demonstrate basic competency in the fundamental understanding of professionalism and ethics and their application to clinical practice.

I. Knowledge: The resident should demonstrate an understanding of the expectations for professional and ethical behavior in the practice of child and adolescent psychiatry to include the following topic areas:

A. Cultural diversity issues impacting clinical practice
B. Legal and ethical aspects of confidentiality, rights of minors and their guardians, involuntary commitment, informed consent, custody, and child abuse
C. Institutional, local, and state regulations pertinent to clinical care

II. Skills: The resident should demonstrate the ability to:

A. Complete culturally sensitive evaluations and make treatment planning decisions which are in the best interests of patients from diverse backgrounds
B. Review and discuss applicable legal, professional, and ethical guidelines
C. Obtain and discuss treatment consent and information release forms as appropriate
D. Maintain one’s practice within applicable legal, professional, and ethical guidelines
E. Document in clinical charts discussions concerning the use of medications to include expected benefits, alternative treatments, side effects, and risks
III. Attitudes: The resident should demonstrate professionalism and ethical behaviors as evidenced by:
A. Being responsive to patient needs and the needs of society
B. Demonstrating respect for others, differing ideas, and differing backgrounds.
C. Consistently striving to maintain the highest professional and ethical standards
D. Maintaining clearly documented clinical charts with appropriate entries about consents, including medication consents

IV. Assessment: The following tools and measures will be utilized and results reviewed with the resident by the training director:
A. Rotation evaluation by faculty

CORE COMPETENCY
Interpersonal Skills and Communication

Definition
Interpersonal and communication skills involve the resident=s integration and application of techniques, mechanisms, and attitudes that facilitate effective, empathetic communication with colleagues, patients, families, other professionals, and the system. Underlying these technical skills must be a personnel belief system that encourages self evaluation, an understanding of the appropriate situational roles for the physician, and a respect for others.

Main Outcome
By the end of the rotation the resident should have achieved and demonstrated competence in effective interpersonal and communication skills.

I. Knowledge: The resident should demonstrate an understanding of the following broad topic areas:
A. Cultural differences
B. The effect of an individual=s (patient=s or physician=s) emotional reactions and associations to others on the provision of psychiatric care
C. Effective listening skills

II. Skills: The resident should demonstrate effective interpersonal and communication skills in a wide variety of situations and settings:
A. Listen to, understand, and effectively communicate with children, adults, and families.
B. Establish and sustain a >therapeutic alliance@.
C. Elicit and provide information using a spectrum of communication techniques to include verbal, nonverbal, interpretive, and writing techniques.
D. Use communication skills to constructively negotiate treatment planning activities with patients, families, and other professionals.
E. Be aware of the resident=s own feelings and behaviors in psychiatric interactions.
F. Exhibit cultural sensitivity and respect for others.

III. Attitudes: The resident will demonstrate an interest in effective communication and
interpersonal skills in furthering relationships as evidenced by:
A. Demonstrating respect for others, differing ideas, and differing backgrounds.
B. Demonstrating genuine interest in understanding another=s position.
C. Demonstrating genuine desire to build rapport and collaborate with others.
D. Showing a willingness to be a patient advocate.
E. Displaying a willingness to examine and confront one=s own reactions and positions.

IV. Assessment:
The following tools and measures will be utilized and results reviewed with the resident by the training director:
A. Rotation evaluation by faculty

CORE COMPETENCY
Systems-Based Care

Definition
Systems-based care refers to the treatment of children and adolescents with mental health problems in the context of multiple, complex systems.

Main Outcome
By the end of the rotation, the resident should demonstrate competence in child and adolescent psychiatric treatment and consultation across a multiple systems of care (schools, CPS, etc).

I. Knowledge:
The resident should demonstrate an adequate knowledge of the goals, functions, missions, system culture, roles of professionals in the organization, capabilities, interactions with child psychiatry, limitations, and areas for child advocacy in a wide array of public and private care systems to include:
A. Schools and educational organizations
B. Social services
C. Pediatricians, child neurologists and other medical professionals
D. Mental health system
E. Juvenile justice system
F. Child protection agencies
G. Other local, state, and federal government agencies

II. Skills:
The resident should demonstrate the ability to interact with and provide effective consultation to multiple systems, including the ability to:
A. Obtain information from various systems to utilize their resources clinically in collaborative, treatment planning.
B. Function as an effective consultant in various systems.
C. Function as an effective advocate for patients in various systems.
D. Explain to patients, families, and others the nature, function, and roles of individuals in the various agencies with resources for children and adolescents.

III. Attitudes:
The resident will demonstrate an interest in obtaining the best treatments and resource utilization for his/her patient as evidenced by:
A. Maintaining a focus on treatments representing the "best interest" of the patient.
B. Maintaining one's practice within accepted practice guidelines and parameters.
C. Utilizing the concept of "least restrictive environment" in treatment planning and utilization of available resources.
D. Understand and accept the concept that services are best provided as close to home as possible.
E. Maintaining a collaborative with care systems in obtaining optimal care for patients.

IV. Assessment: The following tools and measures will be utilized and results reviewed with the resident by faculty:
   A. Rotation evaluation by faculty
CORE COMPETENCY
Patient Care
Diagnostic Interview and Evaluation

Definition
Competency in clinical diagnostic interviewing and evaluation involves using communication skills, observation skills, clinical science knowledge base, and information synthesis to generate an accurate differential diagnosis, formulation, and comprehensive treatment plan. Developmental, biological, psychological, social, cultural and environmental perspectives are recognized and integrated into the case formulation. This core skill is necessary to establish a beginning therapeutic relationship and to assure proper treatments are initiated in the psychiatric care of children, adolescents, and their families.

Main Outcome
By the end of the rotation the resident should have attained the necessary skills to accurately diagnose common psychiatric disorders, identify etiological and risk factors, and effectively plan and provide psychiatric care to children, adolescents, and their families.

I. Knowledge: The resident should demonstrate a basic knowledge base in clinical child and adolescent psychiatry to include the following broad topic areas:
   A. Child development (normal and abnormal)
   B. Child and adolescent psychopathology
   C. Evaluation and diagnostic procedures to include the mental status examination
   D. Treatment modalities (biological, behavioral, cognitive, social, etc)
   E. Biological and clinical information base
   F. Epidemiology and prevention

II. Skills: The resident should utilize clinical science knowledge and communication skills in clinical evaluations and demonstrate the ability to:
   A. Gather relevant patient data from diagnostic interviewing, mental status examination, family members, other collateral sources, and record review
   B. Apply the relevant clinical science knowledge along with interview data effectively in clinical situations.
   C. Recommend additional diagnostic studies (labs, EEG, neuroimaging, psychological testing, etc).
   D. Generate bio-psycho-social formulations and differential diagnoses
   E. Establish effective communications and initial treatment alliances with patients from diverse cultural and socioeconomic backgrounds.
   F. Utilize and integrate up to date scientific knowledge in areas pertinent to child and adolescent psychiatry in clinical diagnostic and treatment interventions.

III. Attitudes: The resident will demonstrate a commitment to developing an effective diagnostic interview by:
   A. Trying out and integrating as appropriate into one’s own interview style new approaches learned from self directed learning, modeling from peers and supervision by faculty.

IV. Assessment: The following tools and measures will be utilized and results reviewed with the resident by the training director:
   A. Rotation evaluation by faculty
CORE COMPETENCY
General Clinical Science Knowledge
Definition
Clinical science is the knowledge base of established and evolving biological, clinical, and cognitive sciences and the application of this knowledge to the clinical care of children and adolescents with psychiatric problems. Residents are expected to bring an analytical, scientific approach to clinical care situations.

Main Outcome
By the end of the rotation the resident should have attained the necessary knowledge base and application skills to effectively recognize common mental health problems in children and adolescents, be aware of applicable treatment modalities, institute initial treatments in uncomplicated cases, and make referrals to mental health professionals.

I. Knowledge: The resident should demonstrate a basic knowledge of clinical child and adolescent psychiatry to include the following broad topic areas:
   A. Child development (normal and abnormal)
   B. Child and adolescent psychopathology
   C. Evaluation and diagnostic procedures
   D. Treatment modalities (biological, behavioral, cognitive, social, etc)
   E. Biological and clinical information base
   F. Epidemiology and prevention
   G. Child advocacy and ethical issues

II. Skills: The resident should communicate and utilize clinical science knowledge in supervision and clinical care and demonstrate the ability to:
   A. Acquire and discuss their child and adolescent psychiatry knowledge in supervision.
   B. Apply the relevant knowledge effectively in clinical situations.
   C. Utilize and integrate up to date scientific knowledge in areas pertinent to child and adolescent psychiatry in clinical diagnostic and treatment interventions.

III. Attitudes: The resident will demonstrate an interest and commitment to a scientific and investigatory approach to clinical situations as demonstrated by:
   A. Recognizing the need for a commitment to life long learning and participation in continuing medical education.
   B. Demonstrating a willingness to utilize the scientific literature in self-directed learning approaches to gather scientific information pertinent to one=s clinical practice.

IV. Assessment: The following tools and measures will be utilized and results reviewed with the resident by the training director:
   A. Rotation evaluation by faculty
Elective Rotation: Child Neurology

Howard Goodkin, MD, PhD; Robert Rust, MD; Russell Bailey, MD; Nicholas Brenton, MD; Kristen Heinan, MD; Laura Jansen, MD; Denia Ramiriz-Montealegre, MD

Child neurology is a discipline that encompasses the skills of the neurologist, pediatrician, and physician. Detailed understanding of the anatomy, chemistry, and physiology of the nervous system and of the natural history and manifestations of neurological illnesses is required to perform the neurological operations of localization and formulation. These operations permit diagnosis, evaluation, and treatment to be approached in an accurate, elegant, and economical fashion. Understanding of children and their families, childhood development and psychology are among the requisite pediatric skills. Thorough acquaintance with the various non-neurological illnesses to which children are subject is also important since these illnesses may provoke neurological manifestations, may constitute differential diagnostic considerations, and may influence diagnostic and therapeutic decisions. The skills of the physician, including the capacity to provide explanations, answer questions, discern and alleviate fear, appropriately choose among diagnostic and therapeutic options, provide counsel and comfort, and to employ the highest ethical standards are especially required because of the prevalence of incompletely understood, serious, difficult to treat, and complex illnesses within the purview of child neurology.

It is not expected that pediatric residents should acquire, during the course of pediatric training, anything approaching comprehensive mastery of the discipline of child neurology. It is expected that pediatric residents should achieve better understanding of the general methodological approach of the child neurologist and that residents should acquire a keen sense of instances in which the child neurologist should be consulted. It is expected that acquaintance with the general principles of child neurology will improve communication between the pediatrician and neurological and neuro-rehabilitative specialists (neurologists, neurosurgeons, neuroradiologists, neuropsychologists, occupational, speech, and physical therapists). It is expected that pediatric residents will achieve the capacity to recognize the features that suggest neurological disease, even in instances where those manifestations are subtle, confusing, or partially obscured by the presence of manifestations deriving from the dysfunction of other organ systems.

It is further expected that general understanding of the neurological approach to the patient and acquaintance with a selected group of neurological diseases will permit the well-trained pediatrician appropriately to provide initial management of urgent neurological problems, and the appropriate extent of management of non-urgent but common neurological illnesses of children. The well-trained pediatrician should be able to recognize in a given clinical situation the potential for neurological disease requiring urgent evaluation and treatment. The well-trained pediatrician should also be able to recognize and treat or refer children with troublesome non-urgent forms of neurological dysfunction that are variously amenable to formulation, explanation, and treatment. The following specific goals represent the skills that should be attained by all pediatrics residents during training.

**General Principles**

1. Basic understanding of the anatomy of the central and peripheral nervous system and the capacity to roughly localize a neurological complaint on the basis of:
   a. Mental status, higher cortical function
   b. Cranial nerve function
   c. Motor system function
      - pyramidal
      - Extrapyramidal
   d. Motor system reflexes, tone
   e. Coordination, cerebellar system
   f. Sensory function
2. Capacity to observe children and discern many of the elements noted above, adjusting expectations to the developmental stage of the patient.

3. Capacity to obtain a neurological history from the patient and family, placing appropriate emphasis on questions of particular importance to neurological formulation.

4. Capacity to perform an adequate neurological examination tailored to the specific complaint and history, the age and developmental status of the patient, and the immediate medical circumstances.

5. Capacity to choose wisely among the wide variety of available tests and therapies pertinent to the particular circumstances of the patient.

**Specific illnesses**

Classification, evaluation, and treatment of:

1. Common childhood headache diatheses
   a. Cyclic vomiting
   b. Common and classic migraine
   c. Tension headache
   d. Chronic daily headache
   e. Complicated migraine including acute confusional migraine
   f. Pseudotumor cerebri
   g. Other symptomatic headache diatheses

2. Common childhood seizure disorders
   a. Neonatal seizures
   b. Infantile spasms
   c. Mixed seizure disorders
   d. Absence, atypical absence, juvenile myoclonic epilepsy
   e. Rolandoic seizures
   f. Partial complex seizures
   g. Generalized tonic-clonic seizures
   h. Febrile seizures
   i. Status epilepticus

3. Neonatal hypoxic-ischemic and hemorrhagic brain disturbances (PL-1)

4. Accidental and non-accidental brain trauma of infants and children (PL-2)

5. Meningitis, encephalitis, and related disorders (PL-1)

6. Postinfectious disorders
   a. Acute post-infectious cerebellar ataxia
   b. Acute disseminated encephalomyelitis
   c. Guillain-Barre syndrome

7. Cerebral palsy

8. Attention-deficit/hyperactivity disorders and related issues of learning, mood, etc. (PL-1)

9. General principles of the evaluation of weakness in children (PL-2)
10. General principles of the recognition, evaluation, and management of metabolic, genetic, and degenerative disorders affecting the nervous system

11. Pediatric coma, brain-death (PL-2)

12. Macrocephaly, microcephaly, hydrocephaly

Methods

In order to achieve these goals the following mechanisms will be employed:

1. Participation in the discussion of neurological patients in pediatric morning report.

2. Participation in inpatient neurological consultation.

3. Child neurology conference for pediatric house officers consisting of discussion and where feasible examination of children with neurological diseases. This conference will emphasize ways in which history ascertainment and examination skills may be improved as well as the principles of evaluation and management of the neurological diseases of inpatient children and adolescents.

4. Participation in the child neurology clinic in the setting of the pediatric outpatient clinics structure. Child neurology is increasingly an outpatient discipline and skill in evaluation of outpatients with neurological complaints is a particularly important objective. PL-2's or PL-3's on child neurology elective will spend a significant portion of the elective in child neurology outpatient clinic.

5. Participation in outpatient consultations by child neurology.

6. Participation in “programmed learning” based on the discussion of case scenarios pertinent to the general principles and specific illnesses noted above.

Supervision

Residents will be directly supervised by the Pediatric Neurology faculty.

Other Information

1. Once per month residents will make a formal case presentation and discussion at Pediatric Morning Report.

2. While on the Neurology Service, residents provide night call coverage in other areas, but are not expected to provide night call for the Pediatric Neurology Service.
Elective Rotation: Pediatric Endocrinology

Division Chief: Dr. David Repaske
Faculty: Dr. Mark DeBoer, Dr. Christine Burt Solorzano, Dr. Monica Grover

Educational Objectives

1. Understand normal growth and its common variants (PL-1)
   a. learn different measurement techniques and common errors, and the interpretation of various measurements
   b. learn to plot measurements on growth charts and interpret their significance
   c. understand importance of disease-specific growth charts and where to obtain them
   d. understand the growth velocity in the prime measurement
   e. learn differences associated with different ethnic groups
   f. learn how to counsel children and parents regarding stature

2. Learn how to distinguish growth failure from short stature (PL-2)
   a. learn common causes of short stature
   b. learn how to screen children for non-endocrine causes of short stature and growth failure
   c. learn importance and uses of skeletal maturation determinations
   d. learn how to enumerate and identify primary vs secondary teeth
   e. learn how to communicate findings to family

3. Learn how to determine stage of sexual development using the Tanner Method (PL-2)
   a. understand normal variants of sexual development
   b. learn to distinguish between sexual precocity and premature thelarche or adrenarche
   c. learn to distinguish normal virilization or feminization from the broad range of normal
   d. understand behavioral implications of variations in sexual development

4. Learn to identify enlargement of the thyroid gland (PL-1)
   a. learn to identify signs and symptoms of hypo- and hype-thyroidism
   b. learn what each thyroid function test measures and which to order
   c. learn to identify abnormalities in the newborn thyroid screening and appropriate follow-up
   d. learn how to communicate thyroid physiology and abnormalities to family

5. Learn to identify sexual ambiguity in newborns (PL-2/PL-3)
   a. learn common causes of ambiguity and initial evaluation procedures
   b. learn appropriate responses to parents
   c. understand new concepts of gender differentiation and their application to patient care

6. Learn to distinguish abnormalities in water homeostasis (PL-2/PL-3)
   a. identify protocols for post-operative management of diabetes insipidus
   b. learn how to perform and interpret a water deprivation test.
   c. learn how to instruct families in the use of DDAVP

7. Learn to identify common problems of calcium homeostasis (PL-1)

8. Learn how to diagnosis diabetes mellitus and how to initiate appropriate therapy
   a. learn how to identify diabetic ketoacidosis (PL-1)
   b. learn how to treat diabetic ketoacidosis (PL-3)
   c. learn when an oral or IV glucose tolerance test is indicated (PL-3)
   d. learn importance of insulin, diet, exercise, and blood glucose monitoring (PL-2)
   e. learn how to present diagnosis and implications to parents
9. Become familiar with current therapeutic regimes for longitudinal management and evaluation of children with diabetes mellitus (PL-3)
   a. learn pharmacology of various insulin preparations
   b. identify three types of meal plans used in IDDM
   c. learn how to interpret glycosylated hemoglobin values
   d. identify standards of care for children with IDDM
   e. understand treatment goals for various ages of children
   f. understand the importance of an age appropriate curriculum for self-management
   g. understand how to recognize, treat and prevent hypoglycemia
   h. learn the importance of a multidisciplinary approach to IDDM family care (PL-1)
   i. learn screening evaluations for long term surveillance (renal, lipid, thyroid, eye, foot, etc.)
   j. identify resources available in the community to assist the family and child with IDDM
   k. become familiar with the results of the Diabetes Control and Complications Trial
   l. develop competence as a pediatrician of the diabetes health team

10. Learn to diagnose and evaluate non-iatrogenic hypoglycemia (PL-2)
    a. neonatal hypoglycemia
    b. ketotic hypoglycemia

11. Learn how and when physicians in practice should utilize the consultative services of a pediatric endocrinologist and how the management of endocrine patients can be shared so that their health prognosis can be maximized (PL-3). Know what data an endocrinologist will require to permit efficient consultation by phone or e-mail.

12. Identify resources for continuing medical education in endocrinology

**Methods to Achieve the Goals**

1. Evaluate patients in Endocrine outpatient clinics
2. Participate in Endocrine consultations in hospitalized patients
3. Evaluate and treat children with DKA in ER and PICU
4. Treat inpatients with primary Endocrine diagnoses under the supervision of the endocrinologist
5. Attend weekly patient related conferences
6. Read materials in Division teaching file
7. Consult with attendings on inpatients with possible Endocrine diagnoses
8. Attend monthly resident noon teaching conferences related Endocrine disorders

**Supervision**

Interns and residents will be supervised primarily by the faculty responsible for the clinical activity in which they are participating. In addition, the clinical fellow in Endocrinology has responsibilities for assigning patients for clinics and reviewing written notes. Interns/residents should page “Person on call for Pediatric Endocrinology and/or Diabetes” or a particular patient’s attending faculty for questions.

**Other Information**

The Division of Pediatric Endocrinology is responsible for the evaluation and treatment of infants, children, and adolescents with disorders of the endocrine glands - i.e., pituitary, thyroid, parathyroid, pancreas, adrenal, gonads. The Division also provides consultative evaluation of children with abnormal growth and/or sexual development. In addition, children with abnormalities of carbohydrate homeostasis - i.e., hypoglycemia and/or diabetes mellitus - form a large portion of the Division’s activities.
The Division contributes to the Children’s Medical Center by providing a consultative service to the children in our outpatient clinics (at U.Va. and field clinics) and on our inpatient wards. The faculty are internationally recognized experts in their field and are thus a significant resource to the housestaff, faculty and referring medical community.

Reading List

1. Growth, Genetics, Hormones- Vol 1-16 available in Division Library- Synopsis/Updates on pathophysiology, diagnosis, and treatment of endocrine disorders
2. Pediatric Endocrinology- Kappy, Blizzard, Migeon Text available in Division Library
3. Endocrine and Diabetes Chapters, in Nelson’s Textbook of Endocrinology
Elective Rotation: Pediatric Gastroenterology

Division Chief: Dr. Steven Borowitz
Faculty: Dr. Barrett Barnes, Dr. James Sutphen, Dr. Jeremy Middleton

Objectives

1. Competency in clinical diagnosis and management of common pediatric gastrointestinal and nutritional disorders, including (but not limited to) chronic diarrhea, abdominal pain, upper and lower gastrointestinal bleeding, constipation, inflammatory bowel disease, acute and chronic hepatitis, liver failure and transplantation, short bowel syndrome, parenteral and enteral nutrition, gastroesophageal reflux, motility disorders and neonatal cholestasis.

2. Technical skills to be mastered include history, physical examination, and laboratory interpretation of common gastrointestinal conditions.

3. Observation and familiarity with endoscopic, manometric, liver and enteric biopsy and interpretation are also encouraged.

4. Pursuant to ACGME/ABMS competency requirements, the pediatric gastroenterology service will emphasize and assess several competencies in residency and medical student education including:
   a. compassionate, appropriate and effective approaches to patient care
   b. biomedical, clinical, cognate knowledge and its application
   c. practice-based learning that involves investigation, evaluation and improvement of the resident’s care practices
   d. communication and interpersonal skills
   e. professionalism, ethical principles and sensitivity to diverse patient population
   f. systems-based practice as evidenced by knowledge of the larger context of health care and the ability to call on system resources in an effective manner

Methods

1. The PL-2 or PL-3 residents on Gastroenterology elective will work as front-line clinical gastroenterologist on the pediatric inpatient and outpatient services. All inpatient consultations will be referred first to the resident on elective. Outpatients will be seen first by the resident. Subsequently, all patients will be presented to the attending physician.

2. The resident will also be expected to read a constantly updated compact file of recent articles which is maintained by the pediatric Gastroenterology division and provided to each resident on clinical elective. When appropriate, these articles will be copied for education of other residents involved in the care of patients. Supplemental Ovid computerized searches will also be performed when appropriate.

3. Residents (PL1, PL2 and PL3) who request consultations from the Gastroenterology service will also receive one-on-one instruction in the differential diagnosis and management of the gastrointestinal problems involved in their patient’s care.

4. Residents on the gastroenterology elective (PL2 or PL3) will be actively involved in patients undergoing GI procedures including conscious sedation and endoscopy.

5. Additionally, one noon lecture per month for residents will be provided by the Gastroenterology service. These lectures will focus on case discussions. Three lectures to third year medical students each quarter are provided by the pediatric Gastroenterology attendings. Residents may also attend these lectures.
Supervision

The pediatric gastroenterologist on call will directly supervise Interns and residents on elective and those managing inpatients on the Gastroenterology service.

Other Information

The pediatric Gastroenterology service maintains a large outpatient service and a usual inpatient census of 1 to 3 primary, plus 3 to 4 secondary (active consultative) patients. The pediatric Gastroenterology service has outpatient clinics all day on Monday and Thursday. In addition there are clinics on Tuesday and Friday afternoon. Emergency outpatients are seen any time. Scheduled GI procedures are done on Wednesdays.

Reading List

Elective Rotation: Medical Genetics

Division Chief: Dr. William Wilson
Faculty: Dr. Jennifer Humberson

The Division of Medical Genetics provides a comprehensive training experience for house officers in all areas of medical genetics. The primary goal of the elective is to provide training for house officers in medical genetics appropriate for their practice as a primary care pediatrician. Such training would also form a useful basis for those house officers who later elect further training in a pediatric subspecialty in which medical genetics plays an important part.

Objectives

1. The ability to obtain and properly record a family history using a pedigree.

2. Clinical skills in the physical evaluation of children with birth defects, deformations, growth disorders, and mental retardation, as well as an appreciation of subtle physical findings indicative of systemic disease or specific genetic syndromes.

3. Skills in the formulation of diagnostic testing of patients, based upon their personal and family history and physical findings, with an emphasis on ascertainment of the etiologic basis of the patient's presenting problems.

4. Skills in communicating with families the need for and interpretation of diagnostic genetic testing, as well as implications for long term prognosis and management.

5. A sufficient knowledge base upon which to provide the support and education generally provided by a primary care pediatrician to families, involving issues of prenatal diagnosis and genetic counseling, including the range of options available for family planning.

6. Exposure to common problems in clinical genetics such that, as a primary care pediatrician, the individual has the skills to coordinate and participate in the long term care of children with genetic disorders as well as select and appropriately use medical and related resources available for long term patient care. Examples include: interpretation of newborn screening tests and appropriate follow-up, including the routine care required for phenylketonuria, galactosemia and disorders of fatty acid oxidation, cleft lip and palate, neural tube defects, disorders of growth, including Turner syndrome, Down syndrome, achondroplasia, mental retardation and others.

7. An appreciation of the ethical issues which often arise in medical genetics and the potential for intra-familial conflict which might arise as a result. Examples of such issues include non-paternity, confidentiality, informed consent, right to know, non-directive genetic counseling, and testing of minors.

Methods

1. Twice-weekly genetics clinic at the Primary Care Center where house officers are assigned new patients referred for evaluation of a wide range of clinical concerns and genetic disorders, as well as the opportunity to see established patients.

2. A series of four satellite genetics clinics held monthly throughout the western portion of Virginia that provide opportunities to participate in the evaluation and long term care of numerous patients with genetic disorders as well as opportunities to interact with primary care pediatricians and other physicians in the local communities.
3. Inpatient consultations from all segments of the Children's Hospital and other clinical departments in the medical center.

4. The Division supervises a full range of diagnostic genetics laboratories which provide house officers opportunities to select and evaluate appropriate genetic testing in patient evaluations and family counseling.

5. The Division provides a weekly genetics conference which combines clinical and laboratory review of current patients, as well as didactic presentations of new developments in medical genetics.

6. House officers are introduced to and encouraged to use the many computerized data bases available to assist in patient evaluation and family counseling. These include: GeneTests, Online Mendelian Inheritance in Man, London Dysmorphology Database, Possum and the Human Genome Database.

**Supervision**

All staff members of the Division participate in house staff training, both one-on-one in direct patient care, as well as in formal and informal teaching sessions. Disciplines with board certification include: clinical genetics, cytogenetics, molecular genetics, biochemical genetics, and genetic counseling.

The elective provides an in-depth exposure to the full range of clinical issues encountered in medical genetics. Success of the elective will be reflected in the house officer who chooses primary care and possesses the skills to recognize genetic concerns and appropriately initiates and participates in their evaluation and management.

**Reading List**

Reading and reference materials will be made available to each resident at the start of the rotation.
Welcome to Pediatric Hematology/Oncology. Our Division is pleased that you have chosen to rotate with us and we will try to make this an instructive and enjoyable rotation. Please call on any of us if there is some aspect of the rotation that we can modify to suit your specific interests.

Our Division consists of three Faculty, three Nurse Practitioners, a Social Worker, two Data Managers, and an Education Specialist.

Our service is one of the busiest in the Department of Pediatrics. In the outpatient setting we see approximately 30 new cases of pediatric cancer each year. We follow approximately 300 patients with cancer, 65 with sickle cell anemia, and 178 with inherited bleeding disorders. Most of the patients with cancer are treated on or according to national protocols developed thorough the Children’s Oncology Group (COG) of which we are a full member. The COG is a large multi-institutional cancer treatment organization that includes approximately 240 institutions that care for children with cancer. The group seeks to foster a standardized approach to treatment for patients with uncommon disorders, and seeks to ask and answer specific questions about etiology and therapy.

We also see a large number of patients on a referral basis from outside pediatricians and Family Medicine practices for evaluation of anemia, thrombocytopenia, neutropenia, lymphadenopathy, and some genetic disorders.

The inpatient service is usually quite busy with 8-12 patients in the hospital at any given time.

**Goals**

Our goals are for you to:

1. Develop an understanding of the common hematological and oncological disorders of infancy and childhood.

2. Develop a logical and systemic approach to the diagnostic evaluation of children with these disorders. Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

3. Familiarize yourself with the various therapeutic modalities used in the treatment of children with these disorders (surgery, radiation therapy, and chemotherapy).

4. Observe and develop a compassionate and thoughtful approach to children and their families who suffer from malignancies and hematological diseases.

**Methods**

To achieve the goals listed above, the following program is set forth:

1. You should assist with the consultations, evaluate newly referred patients, and help formulate management plans for established patients.

2. You may participate in every aspect of our patients’ care and in all family conferences.
3. You should read as much as you can about the disorders that you encounter while with us. The primary comprehensive textbooks used in the field of Pediatric Hematology/Oncology are:
   a. Nathan and Oski’s Hematology of Infancy and Childhood
   b. Pizzo and Poplack’s Pediatric Oncology
   d. Greaves M. Childhood leukaemia
   e. Pui CH. Acute lymphoblastic Leukemia in Children
   f. Murphy SB. Pediatric Lymphomas: Recent Advances and Commentary on Ki-1 Positive Anaplastic Large-cell Lymphomas of Childhood
   g. Weitzman S, Suryanarayan K, Weinstein HJ. Pediatric Non-Hodgkin’s Lymphoma: Clinical and Biologic prognostic Factors and Risk Allocations
   h. William Hathaway, Scott H. Goodnight Jr. Disorders of Hemostasis & Thrombosis
Copies of these texts can be found in the clinic and in the residents’ library as well as the Medical School Library and in the offices of the attendings. Please use these textbooks and return them.

4. We have also provided a notebook containing several important articles on specific problems in Pediatric Hematology/Oncology. You are encouraged to read the articles, make copies, add to the selection if you find more articles that are germane to some area of Hematology/Oncology that is particularly interesting to you, and return the articles to the notebook. Each of the attendings has an area of particular interest. If you want references on a specific subject please ask one of us who is most likely to have a good selection of material in that area.

5. You are expected to attend and participate in our conferences. You are encouraged to present a newly diagnosed patient at our Tumor Board Conference. We will give you more detailed information about these presentations and we will help you with their preparation. A list of our weekly and monthly conferences is provided.

   Wednesday (every other) at 1 pm : Bone Marrow Review Conference
   Location: 4th Floor, Old Hospital, Microscope Room of the Cancer Center

   Second Wednesday of the month at 4:00 pm: Journal Club
   Location: 4th Floor Barringer, Room 4406

   First Wednesday of each month at 4:00 pm: Tumor Board Conference
   Location: 4th Floor, Old Hospital, Cancer Center Conference Room

   3rd Wednesday of each month at 4:00 pm: Didactic Conference
   Location: 4th Floor Barringer, Room 4406

   Every Thursday - Grand Rounds 8am Camp Heart Auditorium
   Every Friday: 2:00 pm: X-Ray Rounds – Location: Radiology – Hospital
   3:00 pm: Patient Care Conference – 2nd Floor of PCC - Hemo/Onc Clinic

6. You will have an opportunity to see patients in the outpatient clinic during the rotation. This allows you to see a broad selection of hematological and oncologic disorders that might be seen in a primary care setting. You will not be expected to rotate on the inpatient service unless you have a special reason or desire to do so. During your time on the outpatient service you should participate in the evaluation of all new patients who come to the clinic and see the regularly scheduled clinic patients with the attending. In so doing you should obtain and record a focused history, perform a complete physical examination, review and record the laboratory data, develop an assessment of the patient’s current problem(s), and with the guidance of the clinic attending set forth a plan of treatment.

   Special Clinics:
   Sickle Cell Clinic – 4th Thursday of the month - Pediatric Primary Care Clinic
   Bleeding Disorders & Thrombophilia Clinic – 2nd Thursday of the month - Pediatric Primary Care Clinic
   Neuro-oncology Clinic – 1st Tuesday of each month - Pediatric Primary Care Clinic
7. You are encouraged to perform diagnostic and therapeutic procedures (bone marrow aspiration and biopsy and lumbar puncture with administration of intrathecal medications) under direct supervision of the attending.

**Supervision**

One of the attendings is always on call and available by beeper (923-4826). Each attending has a specific clinic day and you will be with one of them each day. All evaluations and treatment of patients on the Pediatric Hematology/Oncology service will be carried out under the direction and supervision of the attending.
Elective Rotation: Infectious Disease

Division Chief: L. B. Grossman, MD
Faculty: J. P. Nataro, MD, PhD; T. A. Schlager, MD; R. B. Turner, MD; L. A. Waggoner-Fountain, MD, MEd

Objectives

1. To become conversant with the evidence which forms the basis for current practice of diagnosis and management of infectious diseases in children.
2. To become personally familiar with procedures and interpretations in the outpatient microbiology laboratory.
3. To utilize the medical knowledge in system based practice and management of inpatients and outpatients with infectious diseases.
4. The division provides an ID primer to all residents during their PL1 as a template of readings to read, fully comprehend and utilize in their practice based learning and care over the three years of pediatric training.
5. Perfect professionalism, interpersonal and communication skills in the care of infectious disease patients and in collaboration with the many services that we work with on a consultant basis.

Methods

1. Daily rounds in which inpatient problems and telephone consultation are discussed in depth.
2. Outpatient consultations are seen by the resident and Infectious Disease consultative attending and discussed in depth.
3. Reading of reference texts and current literature.
4. Participation in conferences, which are centered on patient management take place in the outpatient clinic, the emergency room, on the inpatient service and in collaboration with the adult infectious disease service.
5. Daily laboratory rounds

Supervision

Educational and patient care activities of the resident are supervised by the ID attending of the month. All faculty contribute at teaching conferences.

Evaluation

A formal written evaluation will be completed by a monthly ID attending as well.
## Infectious Disease Elective Reading

**PRIMER OF PEDIATRIC INFECTIOUS DISEASE**  
**BASIC READING FOR UVA PEDIATRIC RESIDENTS**

Mandell – Principles and Practice of Infectious Disease, 7th edition  
Long – Principles and Practice of Pediatric Infectious Disease, 4th edition  
AAP Red Book – 2012 edition  
CONN’s Current Therapy-2011

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## VACCINE PREVENTABLE DISEASES

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<td>Measles (Rubeola)</td>
<td>489-491</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Mumps</td>
<td>514-516</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Pneumococcus (Occult Bacteremia)</td>
<td>571-578</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Rubella</td>
<td>629-630</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Tetanus</td>
<td>707-712</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>774-785</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td><strong>MISCELLANEOUS</strong></td>
<td>2611-2617</td>
<td>Mandell</td>
<td></td>
</tr>
<tr>
<td>Acute Rheumatic Fever</td>
<td>300-304</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Congenital/Perinatal Infections (TORCH)</td>
<td>398-408</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Cytomegalovirus</td>
<td>418-438</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Herpes Simplex</td>
<td>629-631</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Human Immunodeficiency Virus</td>
<td>690-701</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Rubella</td>
<td>720-727</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Syphilis</td>
<td>1622-1626</td>
<td>Nelson</td>
<td></td>
</tr>
<tr>
<td>Toxoplasmosis</td>
<td>33-40</td>
<td>CI-INF.DIS 2012;55</td>
<td></td>
</tr>
<tr>
<td>Endocarditis</td>
<td>262-264</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Escherichia coli 0157:H7 (Hemolytic Uremic Syndrome)</td>
<td>635-639</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Campylobacter</td>
<td>645-647</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Salmonella</td>
<td>925-928</td>
<td>Nelson</td>
<td></td>
</tr>
<tr>
<td>Shigella</td>
<td>1097-1104</td>
<td>Nelson</td>
<td></td>
</tr>
<tr>
<td>Group B Streptococcus</td>
<td>1110-1114</td>
<td>Nelson</td>
<td></td>
</tr>
<tr>
<td>Herpes Simplex (Neonatal, stomatitis, labialis)</td>
<td>2394-2398</td>
<td>Nelson</td>
<td></td>
</tr>
<tr>
<td>Infectious Mononucleosis</td>
<td>477-478</td>
<td>Long</td>
<td></td>
</tr>
<tr>
<td>Osteomyelitis</td>
<td>176-185</td>
<td>Red Book</td>
<td></td>
</tr>
<tr>
<td>Septic Arthritis</td>
<td>1096-1099</td>
<td>Ped Inf Dis J 1999:18</td>
<td></td>
</tr>
<tr>
<td>Sexually Transmitted Disease</td>
<td>339-342</td>
<td>Long</td>
<td></td>
</tr>
<tr>
<td>Streptococcal Cellulitis (Eagle effect)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Urinary Tract Infection</td>
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Elective Rotation: Medical Toxicology

Faculty: Drs. Christopher Holstege and Nathan Charlton

Objectives
Medical Toxicology focuses on the care of the patient poisoned by toxins either intentionally or accidentally. It is the intention of this rotation to provide a strong foundation of knowledge pertaining to the diagnosis and management of acute and chronic poisoning. There will be night and weekend (home) call and weekend rounds.

Patient Care
The rotation will include evaluation of inpatient consults, outpatient clinic patients, and poison center calls. The Medical Toxicology consult service is involved in the management of nearly all poisoned patients admitted to the University of Virginia. Rotating residents will be actively involved in the initial management and treatment of these patients. The rotators will also be involved in accessing patients in the outpatient toxicology clinic. Patient disease states encountered include drugs of abuse (i.e. heroin, cocaine, amphetamines, ghb, inhalants, moonshine), intentional ingestions (i.e. aspirin, acetaminophen, diphenhydramine, verapamil), occupational exposures (i.e. solvents, caustics, hydrofluoric acid, toxic alcohols), environmental toxicities (i.e. mold, carbon monoxide), and natural toxins (envenomations, herbs, plants, mushrooms). Chronic and acute toxicity is seen and different toxic syndromes encountered, including anticholinergic, sympathomimetic, opioid, cholinergic, and withdrawal states. Procedures performed may include gastrointestinal decontamination and critical care bedside management. Supervision will be under an attending and/or fellow at all times.

Medical Knowledge
Rotators will learn to diagnose various toxic syndromes (anticholinergic, sympathomimetic, opioid, cholinergic, and withdrawal states). They will also learn how to manage specific poisonings. These will include prescription drugs, over-the-counter drugs, herbal products, drugs of abuse, natural toxins, occupational chemicals, chemical warfare agents and household products (see below). Rotators will receive a packet at the start of the rotation that includes articles relating to daily lectures.

<table>
<thead>
<tr>
<th>Gen Management</th>
<th>Acetaminophen</th>
<th>Salicylate</th>
<th>Iron</th>
<th>Theophylline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypoglycemics</td>
<td>Digitalis</td>
<td>Antihypertensives</td>
<td>Antidepressants</td>
<td>Opiates</td>
</tr>
<tr>
<td>Toxic Alcohols</td>
<td>Cocaine</td>
<td>Amphet/Metcath</td>
<td>Plants</td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Vitamins</td>
<td>Caffeine</td>
<td>Anticonvulsants</td>
<td>Antihistamines</td>
<td>Anticoagulants</td>
</tr>
<tr>
<td>Antituberculosis</td>
<td>Antimalarial</td>
<td>Ergotamine</td>
<td>Antimicrobials</td>
<td>Neuroleptics</td>
</tr>
<tr>
<td>Drug Withdraw</td>
<td>Botulism</td>
<td>Tox Lab</td>
<td>Neurotransmitters</td>
<td>Antidotes</td>
</tr>
<tr>
<td>Mothballs</td>
<td>Rodenticides</td>
<td>Herbicides</td>
<td>Caustics/Batteries</td>
<td>Marine Animals</td>
</tr>
<tr>
<td>Food Poisoning</td>
<td>Herbal Medicine</td>
<td>Nicotine</td>
<td>Arsenic</td>
<td>Mercury</td>
</tr>
<tr>
<td>NMS/SS/MH</td>
<td>Sedative-Hypnotic</td>
<td>PCP</td>
<td>Hallucinogens</td>
<td>Marijuana</td>
</tr>
<tr>
<td>Hydrocarbons</td>
<td>Snakes</td>
<td>Smoke Inhalation</td>
<td>Insecticides/Nerve</td>
<td>Lead</td>
</tr>
<tr>
<td>INH</td>
<td>NSAIDS</td>
<td>Strychnine</td>
<td>Antidotes</td>
<td>Hazmat</td>
</tr>
<tr>
<td>Lithium</td>
<td>Teratology</td>
<td>Inhalants</td>
<td>Cases</td>
<td>Murder</td>
</tr>
</tbody>
</table>
**Practice-Based Learning**
Weekly conferences and assigned presentations are intended to teach rotator evidence-based medicine principles as they apply to the field of toxicology. Topics are derived from clinical questions that arise regarding patient care on the inpatient consult service or the cases managed by the Poison Center.

**Journal Club** - Each rotator reads two articles pertaining to a topic in toxicology and a brief review of each is given.

**Tox Talks** - An extensive literature review with brief PowerPoint presentation and typed handout including bibliography is prepared by each of the rotators pertaining to a focused topic in toxicology. This is done every Friday with all toxicology staff present.

**Systems-Based Learning**
Inpatient cases followed by the Blue Ridge Poison Center will be reviewed daily. The Blue Ridge Poison Center manages a region encompassing 2.8 million people and receives approximately 24,000 calls each year pertaining to human poisonings.

Topics related to disaster medical response and terrorism are covered during the rotation. The role of the physician in the disaster medical response system and the role of the poison center in chemical disasters and terrorism are discussed in a case-based format.

Learning methods will include bedside patient management teaching, clinical case review in the center, formal didactics, and human patient simulator programs.

**Interpersonal and Communications Skills**
In addition to skills of patient interview and interactions with colleagues, the rotators are introduced to the concept of risk communication. The application of these skills are discussed for use during crisis or when dealing with difficult patients complaining about environmental exposures and perceived poisoning.

**Professionalism**
Medical decision making involving ethical issues related to end of life, suicide, substance abuse, child neglect/abuse, and patient rights are discussed on a case by case basis throughout the rotation.

Main contact for rotation: Heather Collier (administrative director) or Dr. David Lawrence (physician coordinator) at (434) 924-5185

Number of residents you are capable of handling at any one session: 3 Pediatric Residents

Clinic Schedule: Varies on need
Schedules:
The following chart gives an approximate synopsis of weekly activities and time commitment for the residents rotating on Medical Toxicology. The clinical consult service takes priority and supersedes this schedule when necessary.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-10:00</td>
<td>Inpatient Rounds</td>
<td>Inpatient Rounds</td>
<td>Emergency Medicine</td>
<td>Inpatient Rounds</td>
<td>Inpatient Rounds</td>
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<tr>
<td></td>
<td>Didactics</td>
<td>Didactics</td>
<td>Didactics</td>
<td>Didactics</td>
<td>Didactics</td>
</tr>
<tr>
<td>10:00-11:00</td>
<td>Review Calls</td>
<td>Review Calls</td>
<td>Review Calls</td>
<td>Review Calls</td>
<td>Review Calls</td>
</tr>
<tr>
<td>11:00-12:00</td>
<td>Tox Talks</td>
<td>Chap Review</td>
<td>Didactics</td>
<td>Journal Club</td>
<td>Tox Talks</td>
</tr>
<tr>
<td>1:00-5:00</td>
<td>Inpatient Duties &amp; Assignments</td>
<td>Inpatient Duties &amp; Assignments</td>
<td>Inpatient Duties &amp; Assignments</td>
<td>Inpatient Duties &amp; Assignments</td>
<td>Inpatient Duties &amp; Assignments</td>
</tr>
</tbody>
</table>

**Key:**
- **Inpatient Rounds**- UVa inpatient rounds with bedside teaching by staff with rotating residents, students & pharmacy students. Rounds are typically with inpatient services (e.g. ICU) & include morning reports.
- **Review Calls**- Review poison center calls pertaining to inpatients at the other 48 hospitals covered by the center and teaching regarding management of specific cases. Follow-up calls with appropriate recommendations follow.
- **Journal Club**- Each rotator reads two articles pertaining to a topic in toxicology and a brief review of each is given.
- **Tox Talks**- An extensive literature review and brief PowerPoint presentation with typed handout including bibliography is prepared by each of the rotators pertaining to a focused topic in toxicology. This is done every Friday with all toxicology staff present.
- **Chap Review**- A specific chapter will be reviewed by the group and extensively discussed.
- **Toxicology Clinic**- Patients are evaluated in our clinic by both a resident and staff and the assessment and plan is subsequently devised by the resident and reviewed with the staff toxicologist.
- **Didactics**- Each day, one of the toxicology attendings will present typically two topics listed to the rotators. In addition, topics not on this list are reviewed and taught by a staff toxicologist daily to the resident rotators.

Required reading: CD provided with all articles required for reading during the rotation

Any on call responsibilities: Home call with potential to be called into hospital. Number of call nights required is dependent on duration of toxicology rotation.

Any weekend responsibilities: one weekend per month rotated
Required reading during the rotation:

Elective Rotation: Pediatric Nephrology (Renal)

Division Chief: Dr. Victoria Norwood
Faculty: Drs. John Barcia, Jennifer Charlton

The pediatric renal elective provides an opportunity for pediatric house officers (PL-2 and PL-3) to become familiar with evaluation and management of a variety of clinical nephrologic problems as they may be encountered by pediatricians. Options also exist for brief research experiences.

Objectives

1. During the renal elective, it is expected that house officers will have the opportunity to study and learn to evaluate and manage:
   a. Basic fluid and electrolyte disorders
   b. UTIs and vesicoureteral reflux
   c. Hypertension
   d. Congenital abnormalities in the newborn
   e. Acute kidney injury
   f. Glomerular and tubular diseases
   g. Hematuria and proteinuria

2. The resident will be exposed to the intricacies of acute and chronic dialysis and transplantation as it pertains to the viewpoint of a general pediatric education.

Methods to Achieve the Objectives

1. Inpatient: New admissions or consultations on patients will be first reviewed by the resident and/or fellow (if present) as determined by the attending. Rotating pediatric residents will be assigned to those consults most appropriate to a general pediatric practitioner. After taking a history, examining the patient and organizing the available laboratory data, the patient will be discussed with the attending pediatric nephrologist who will review the management plan and suggest additional reading. The resident will remain the first-line nephrologist for all patients to whom he/she has been assigned and serve as consultant to the ward residents with backup consultation by the fellow and the attending.

2. Outpatient: In the outpatient clinic, residents will be assigned to evaluate and care for children with issues of particular interest and benefit to primary pediatricians. The resident will see the patient first and review the case with the attending.

3. A collection of pertinent articles relating to most aspects of clinical pediatric nephrology is available to the resident in the pediatric library. It is expected that the resident will use this and other resources to learn about the medical issues pertinent to the patient.

4. In addition to the regularly scheduled rounds, one-on-one time with the faculty is scheduled daily for resident teaching.

5. The resident is expected to attend all pediatric renal conferences, including joint pediatric/adult renal grand rounds (Tuesday noon, Kidney Center Conference Room), renal clinic conference (Friday 10:00-12:00 PM), and the pediatric nephrology division conference (Tuesday 1:15PM).
Supervision

At all times the resident is supervised by the inpatient pediatric nephrology attending or the nephrology attending(s) present in the clinic. During times when there is also a pediatric nephrology fellow in training, the resident is encouraged to utilize the fellow as an additional resource although ultimate supervision remains with the attending. The residents should feel free to contact the fellow, the renal nurse practitioner, and the attending for any questions. The current GME Guidelines for Supervision for the Division are in effect at all times.

Other Information

Ward rounds will be made at 8:35 AM Monday through Friday (9:00 AM Thursday). It is expected that the resident will be familiar with recent developments regarding his assigned patients, thus allowing maximum time for teaching and formulation of treatment plans. Daily notes should be written by the resident on each patient being actively followed.

Pediatric Renal Clinic is held in the Subspecialty Clinic area on the second floor of Primary Care each Tuesday 8:30-noon, Wednesday from 8:30 AM until 4:30 PM, and many Thursdays 8:30-noon. A third-year medical student is often in the clinic and should be allowed to be present during the resident’s evaluation. All initial visit and follow up clinic notes will be detailed in EPIC. The results of the lab studies and any changes in medications or return appointments will be discussed at the Friday review conference.

Telephone Numbers:
Peds Renal Office: 434-924-2096
Victoria Norwood, M.D.: 434-924-2096
John Barcia, M.D.: 434-924-2096
Jennifer Charlton, MD 434-924-2096

Residents will be expected to demonstrate compassionate and effective care for the patients and families they encounter and to utilize newly developed clinical knowledge and skills for application to patient care. Residents are to acquire and demonstrate enhanced knowledge of the interactions between pediatric renal disease and the health care system as a whole and to work effectively as a member of the health care team. Residents are expected to be involved in self-teaching and evaluation and to demonstrate professional behavior at all times.

Reading List

Blood Pressure: Normal and Hypertension

UTI / Reflux

Cystic Diseases

Acute Renal Failure

ESRD / Transplant
2. Disturbances of Brain Maturation and Neurodevelopment During Chronic Renal Failure in Infancy. Bock, GH; Conners, CK; Ruley, J; Samango-Sprouse, CA; Conry, JA; Weiss, I; Eng, G; Johnson, EL; David, CT. Journal of Pediatrics - Volume 114, pp. 231-238, 1989.

Stones

Renal Tubular Acidosis

Hematuria/Proteinuria


**Neonatal Nephrology**

**Fluids And Electrolytes**

**Miscellaneous**
Elective Rotation: Pediatric Ophthalmology

Faculty: Drs. Bruce T. Carter and Christian Carter

Objectives

The resident is expected to become familiar with the diagnosis and management of common ophthalmologic problems specific to pediatrics.

Methods

1. PL-2 or PL-3 residents will participate in the outpatient clinics of Dr. Bruce T. Carter, faculty member of the Department of Ophthalmology in Pediatrics. In this setting, the resident will assist with evaluation of the patients, and the management of established patients.
2. Residents are also given directive readings about pediatric ophthalmologic issues.
3. Residents are invited to attend operative procedures done by Dr. Carter at the University of Virginia Surgical Facilities.
4. Residents are encouraged to present a pertinent case at Morning Report during the elective month.

Supervision

All educational and patient care activities of the resident on the ophthalmology elective will be directly supervised by Drs. Bruce or Christian Carter.

Other Information

Dr. Carter’s office and the location of this outpatient experience is 1101 Jefferson Street, East, Charlottesville, Virginia. Contact Gayle in Dr. Carters’ office one to two weeks prior to the start of the rotation concerning further details of this elective experience.

galem@cstone.net

(434) 295-5193
Elective Rotation: Pediatric Orthopaedics

Faculty: Drs. Mark Abel, Mark Romness, Leigh Ann Lather

Objectives

This elective is intended to provide the pediatric Resident an introduction in the evaluation, diagnosis, and initial treatment for a variety of pediatrics musculoskeletal conditions. Exposure to splinting, bracing and casting techniques will occur.

Methods

1. Through active involvement in the orthopedic outpatient clinic, the resident will be exposed to the full spectrum of pediatric musculoskeletal problems, including cerebral palsy, myelomeningocele, scoliosis, muscular dystrophy, fractures, and general orthopaedic pathology (club feet, DDH, intoeing, etc).
2. Instruction is provided in the application of splints and casts.
3. Attendance at surgery and inpatient rounds is optional.
4. Attendance at orthopedic conferences, the pediatric focus, is encouraged.
5. Service specific conference (Thursday, 6 AM) is topic based.

Supervision

The resident will see patients in clinic with direct attending supervision. Working with children and parents in a family centered atmosphere is emphasized.

Evaluation

Evaluations will be based on the acquisition of basic science and clinical orthopaedic knowledge, the ability to work well with children and their families, the attaining of good communication skills among team members and understanding the role of a pediatric surgical subspecialist in the comprehensive evaluation and management of children.

Other Information

This rotation is exclusively an outpatient rotation. Dr. Abel will recommend specific readings relevant to the cases seen by the resident.

Reading List

Elective Rotation: Pediatric Pulmonology

Division Head: Dr. Gerald Teague
Faculty: Drs. Deborah Froh, Andrea Garrod

Objectives

1. Residents on the Pulmonology elective will acquire knowledge of the evaluation and management of infants and children with a variety of acute and chronic lung diseases. Experience will span the spectrum from uncomplicated outpatient followup to critical care respiratory issues.

2. Residents will become familiar with asthma, bronchopulmonary dysplasia, pulmonary infections, cystic fibrosis, airway anomalies, congenital lung malformations, obstructive sleep apnea, restrictive lung diseases, and use of mechanical ventilation.

3. Residents are expected to become familiar with procedures relevant to the pulmonary subspecialty, including lung function testing and bronchoscopy.

Methods

1. Residents will attend the outpatient clinics, including two half-day pulmonary clinics in the Primary Care Center and one full day Cystic Fibrosis Clinic at the Kluge Children’s Rehabilitation Center. Residents will be the physician of first contact for pulmonary consultations.

2. Residents are also invited to attend the monthly satellite Cystic Fibrosis Clinic at either Roanoke or Wytheville.

3. Residents should observe techniques used in the pulmonary function laboratory and the sleep laboratory. Residents will be the physician of first contact for pulmonary consultations.

4. Residents are expected to attend the monthly Pulmonology/Radiology X-ray Conference, and they are expected to give a thirty-minute presentation to the Respiratory Medicine group on a pulmonary topic.

5. Each resident will make a formal presentation and discussion once a month at Morning Report.

Supervision

Residents are directly supervised by attending subspecialists in all inpatient and outpatient activities.

Other Information

While on the pulmonology service, residents may provide night call coverage in other areas, but are not expected to provide night call for the division.

The Pulmonology Division faculty will provide a reading list of relevant articles and book chapters on the important childhood pulmonary diseases.

Residents are also invited to participate in any ongoing clinical research projects within the pulmonology division.
Elective Rotation: Sedation Service

Division Director: Jeannean Carver, MD
Medical Director: Bill Harmon, MD
Faculty: Julie Haizlip, MD; Tony Camorata, MD; Noreen Crain, MD; Laura Lee, MD, Gary Fang, MD; Melissa Sacco, MD; Michelle Adu-Darko, MD
Nursing: Esther McClure

Introduction:
The pediatric sedation service was instituted in 1999 to provide analgesia and deep sedation for infants and children undergoing diagnostic or therapeutic procedures. The service is mobile and travels throughout the hospital providing care to inpatients and outpatients at the location of the procedure. The team consists of a PICU nurse and attending physician. For the majority of cases, the attending physician provides modified anesthesia care that anticipates spontaneous natural breathing, though the team is fully equipped to support the child in any capacity.
The need for safe and effective procedural sedation for pediatric patients is more commonly recognized around the country. While some centers provide this care with boarded anesthesiologists, many children’s hospitals and pediatric centers have enlisted the help of pediatric intensivists to attend to these patients and their unique needs. Our service is among the first in the country, and the demand for our services is high.
Residents in pediatrics will rotate on the sedation service in their PGY-2 year. The resident will have the opportunity to learn from an experienced ICU nurse and attending physician in a one-one-one mentored situation while caring for a child who requires safe and effective procedural sedation. The resident’s achievement in this area will be assessed using written faculty evaluations and 360 evaluations.

*Residents are required to complete an MRI CBL prior to the rotation.

Goals of Rotation on Pediatric Sedation Service
1. Demonstrate techniques that support uncomplicated pediatric airways.
   a. Jaw thrust, oral/nasal airways, bag mask (one person) bag mask (two person)
   b. CPAP vs BVM ventilation
2. Have successfully placed an IV in at least one patient.
3. Anticipate and articulate patient factors that define a “high-risk” or “difficult” airway, identifiable by:
   a. History
   b. Physical Exam,
   c. Synthesis of prior data (eg., patient with mediastinal mass, brainstem process, etc.)
   d. Assess the ASA class to patients prior to sedation
4. Identify and list essential components of a safe “environment of care” for pediatric procedural sedation patients.
   a. Suction and appropriate instruments (and technique) for clearing the airway
   b. Oxygen supply and delivery devices
   c. Artificial airways, and airway adjuncts
   d. Pharmacologic agents
   e. Appropriate Monitoring
5. Obtain consent for moderate and deep sedation, including articulating and identifying anticipated complications of procedural sedation.
   a. Cardiovascular responses
      i. Bradycardia
      ii. Hypotension
   b. Respiratory/Airway responses
      i. Bradypnea/apnea
      ii. Hypoventilation/hypercarbia
      iii. Upper airway obstruction
      iv. Reflux/Emesis with or without aspiration

6. Discuss appropriate stabilizing or rescue interventions for complications during procedural sedation, including:
   a. Cardiovascular responses
      i. Bradycardia
      ii. Hypotension
   b. Respiratory/Airway responses
      i. Bradypnea/apnea
      ii. Hypoventilation/hypercarbia
      iii. Upper airway obstruction
      iv. Reflux/Emesis with or without aspiration
      v. Laryngospasm
   c. Hypothermia

7. Describe basic pharmacologic principles relevant to procedural sedation medications.
   a. Volume of Distribution
   b. Half-life
   c. Zero-order elimination kinetics
   d. First-order elimination kinetics

8. Demonstrate familiarity with 1st line sedation/analgesic medications commonly used in Pediatrics. (indications, routes of administration, duration of action, specific mechanisms, effects, and side effects)
   a. Versed
   b. Ketamine
   c. Fentanyl
   d. Propofol
   e. Dexmedetomidine
   f. Pentobarbital

9. Demonstrate familiarity with reversal or rescue agents used to treat complications of sedation. Be able to articulate indications, contraindications, effects, and specific settings of use:
   a. Naloxone/Narcan
   b. Flumazenil
   c. Succinylcholine
   d. Glycopyrrolate
   e. Atropine

10. Demonstrate familiarity with the indications/contraindications/limitations and pharmacologic profile of the inhalational sedative, nitrous oxide.
11. Describe the role and limitations of, monitoring options in procedural sedation.
   a. Hemodynamic monitoring
   b. Pulse oximetry
   c. EtCO2/capnometry/capnography

12. Be able to formulate appropriate sedation strategy(s) for each.
   a. IV placement
   b. Lumbar puncture
   c. CT scan
   d. MRI scan
   e. Suturing/suture removal
   f. VCUG
   g. GI endoscopy
   h. EMG

13. Demonstrate an understanding of the risks and benefits of ordering procedures with sedation as a practicing pediatrician.

**Patient Care**
- Residents will describe standard monitoring and safety practices for procedural sedation for children.
- Residents will demonstrate preparation, set-up and use of standard monitoring equipment on infants and children receiving procedural sedation
- Residents will demonstrate recognition of problems and implementation of rescue maneuvers for a child experiencing difficulty with the sedation.
- Residents will have the opportunity to place IV catheters in children requiring procedural sedation under the direct supervision of the attending physician on the service.
- Residents will demonstrate techniques for non-invasive support of the airway in a sedated child such as positioning, airway adjuncts, and bag-mask ventilation under the direct supervision of the attending physician on the service.

**Medical Knowledge**
- Residents will demonstrate and apply appropriate patient selection, preparation, plan of care, and standard monitoring of sedated patients, including demonstrating understanding of the implications of a particular procedure and care environment or setting.
- Residents will expand their knowledge base of sedative and analgesic medications, describing several standard sedation regimens and their various advantages and disadvantages.
- Residents will learn the particular points of the history and physical exam as they pertain to the proposed sedation and procedural plan of care.

**Practice-Based Learning and Improvement**
- Residents will demonstrate recognition of problems and implementation of rescue maneuvers for a child experiencing difficulty with the sedation.
- Residents will learn from and incorporate feedback from multiple professionals on the sedation team.

**Interpersonal and Communication Skills**
- Residents will learn the nuances and timing of the sedation service, demonstrating flexibility and compassion for the children and families we serve as well as the professional colleagues who rely on the service for the care of their patients.
- Residents will discuss risks, benefits and alternatives to the proposed anesthetic plan of care with patients and families.

**Professionalism**
- Residents will learn the nuances and timing of the sedation service, demonstrating flexibility and compassion for the children and families we serve as well as the professional colleagues who rely on the service for the care of their patients.

**Systems-Based Practice**
- Residents will demonstrate understanding of the balance between service and education on this service as in others. While benefitting from one-on-one education with faculty physicians and experienced nurse colleagues, residents will demonstrate understanding of the larger view and approach for child and family needing procedural sedation.
Elective Rotation: Pediatric Surgery

Elective Director: Gene McGahren, MD
Faculty: Brad Rodgers, MD, Bart Kane, MD, Jeff Gander, MD

The Pediatric Surgery Service is a division of the Department of General Surgery. There are two full-time attending Pediatric Surgeons: Bradley M. Rodgers M.D. (Professor and Chief of Division), Eugene D. McGahren M.D., and Bartholomew Kane. The team of residents usually consists of a Categorical General Surgery Resident in his/her 4th year and three junior residents. The 4th year Resident is the Chief Resident of the service and rotates for a three-month period. The junior residents are usually a 1st or 2nd year Surgery resident (categorical or preliminary), a 1st year Pediatrics resident, and a 1st year Emergency Room resident. There are also 1 or 2 third year medical students on a rotation that lasts three weeks.

Goals and Objectives for Surgical Specialties

Patient Care

Chief Surgical Resident

Responsible for overall management of patient care on the service. This involves but is not limited to:
1. Twice daily ward rounds for patient evaluation and management. This involves supervision of the junior residents in these functions as well. The on-call attending participates in the afternoon rounds every day for teaching purposes.
2. Evaluation of each admission and consult.
3. Participation in and performance of operative cases according to his/her abilities and always with attending presence. He/she also assigns cases to junior residents as appropriate.
4. Attend Pediatric Surgery outpatient clinics held by each attending one day a week. Evaluate pre and post-operative patients in conjunction with the attending.
5. Teaching junior residents and medical students principles of pediatric patient management, and guide them in their ward presentations on rounds.
6. Organization of weekly teaching conference.
7. The senior surgical resident should also be aware of the work hours and call status of the junior residents so that applicable guidelines are followed.
8. The Chief surgical resident is the key conduit of information to the attending staff and should communicate with at least the call attending each morning regarding the entire service. It is desirable that s/he also contact the other attendings to discuss their patients. It is imperative that there should be ongoing communication with the appropriate attending(s) about any new patients, active management issues, or any significant changes in patient courses.

Junior Surgical Residents

1. Participate in twice daily ward rounds (when work hours and call schedule permit) and actively participate in all aspects of patient evaluation and management. They are supervised by the Chief Resident and the attending surgeons. The on-call attending participates in the afternoon rounds every day for teaching purposes.
2. Evaluate admitted patients and consults. Consults should always be seen in a timely manner and interactions should always be cordial and professional. Complete a written assessment and plan for review by the Chief Surgical Resident and attendings.
3. Participate in operative cases according to his/her abilities and always with attending presence. Non-surgical residents are expected to scrub in as assistants or observe operative cases when there are not other overriding priorities on the service.
4. Attend Pediatric Surgery outpatient clinics held one day a week by each attending. Evaluate pre and post-operative patients in conjunction with the attending.
5. Help teach medical students principles of pediatric patient management and simple procedures. Junior surgical residents should try to help students with their ward presentations when possible.
6. Make a formal presentation of a pediatric surgical topic of their choice for discussion at weekly pediatric surgery conference.

**Medical Knowledge**

Junior Surgical Residents are expected to:

1. Understand basic embryology, normal development, and common congenital anomalies.
2. Understand normal physiology of children of different ages.
3. Evaluate patients and formulate treatment plans for pediatric surgical conditions, trauma victims, and critically ill patients. Junior residents should be able to appropriately assess patient vital signs, physical findings, urine outputs, etc. They should be able to manage fluids, nutrition, and ordering of appropriate investigative studies and laboratory tests.
4. Interact effectively with members of the Pediatrics teams and subspecialists in the care of children.
5. Read appropriate text material on General Pediatric Surgery, and current literature on pertinent cases.

**Practice-Based Learning and Improvement**

All aspects of patient care listed above are continuously evaluated by the resident and supervising attendings so as to best apply and develop the most effective means of patient care as determined by experience and by evidence available in the scientific and medical literature.

**Interpersonal and Communication Skills**

Appropriate interpersonal interactions and communications with patients, families, and professional colleagues and consultants are reinforced continuously through rounds, conferences, consultation activities, operating room activities, and all other professional activities.

**Professionalism**

Professionalism is reinforced through continuous example from mentors in carrying out all professional activities responsibly, adhering to ethical principles, and remaining sensitive and respectful of all patients and colleagues.

**Systems-Based Practice**

Care is taken to expose the residents to the attributes of being aware of and working cooperatively within the realm of the hospital system and the medical system at large. They will learn how to access the hospital and medical system resources in order to optimize patient care.

**Call Schedules**

In general, the Chief Resident takes every-night call from his/her home for inpatients on the service. The Chief Resident is generally on call in the hospital one day every week and must leave the hospital by noon the following day after appropriate sign-out to the on-call attending or cross-covering Chief.

Overall call schedule is determined by the Administrative Chief Resident in the Department of Surgery. The 80 hour work-week must be adhered to and it is the Chief Resident’s responsibility to do so. Attendings also monitor this.
The Pediatric Junior Surgical Resident (PL-1) generally takes in-hospital day call. (Alterations in schedule may be made by the Administrative Chief in the Department of Surgery in accordance with the needs of the Department and the Division of Pediatric Surgery.)

All residents are scheduled such that they work no more than 80 hours per week in the hospital and have 1 day in 7 off on average. Adherence is monitored by the Chief Resident and the attending faculty.
Appendix 1: Rotation Forms

Rotation Forms

Away Rotation Application
Away Rotation Evaluation
International Health Application (see additional information below)

Forms available at GME web site (bottom of page under “Documents & Forms”).

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International Health Rotation

Application form available at GME web site (bottom of page under “Documents & Forms”).

To participate in an international rotation, you are required to obtain approval at three levels:

- Your residency program,
- University of Virginia’s International Studies Office,
- UVa Health System’s Graduate Medical Education (GME) Office.

It is helpful to obtain the approvals in this order, as you will need components from the first two to obtain the final approval from the GME office. Obtaining these approvals is essential to making sure that:

- You receive credit for your rotation,
- You have appropriate insurance in case of emergency,
- Your salary and benefits are uninterrupted.

Detailed directions and hints are below:

Approval from Program Director (Assures ACGME Compliance)

1. You will need to provide Linda Waggoner-Fountain with an outline of the rotation proposal, detailing the following:
   a. goals and objectives of the rotation, focusing on how these complement the 6 core ACGME competencies
   b. outline of the day to day activities of the rotation
   c. description of your supervising physician abroad (with their CV) and their role in evaluating your performance
   d. your post-trip evaluation and plans for an oral presentation about the rotation upon your return

2. Contact Dr. Waggoner-Fountain. She can assist you in developing your rotation proposal as described above. In addition, there are several countries that have long-term collaborations with UVa. Those countries have designated country directors at UVa. Drs. Linda Waggoner-Fountain or Leigh Grossman will help you identify the country director. It will be important to contact this person to let them know your plans. The directors also usually have great contacts and advice.

3. Remember that if you are planning to deliver direct patient care during a rotation abroad you may need to apply for a medical license in that country. (Uganda is one example of this.) This process usually takes several months. Check with your mentor abroad.
UVA International Studies Office (ISO)

1. International Studies Office
   a. Contact Stacey Hansen (srh4v@virginia.edu, 434-924-4252) who will set up an orientation session to help you navigate the ISO on-line application. Once you have completed the necessary on-line information, she will send an email to the GME office confirming that this is done.
   b. The ISO is part of the University of Virginia and residents are considered “graduate students” for the purpose of the ISO – as such, you basically need to register with the ISO office on-line.

2. Health insurance (emergency coverage is usually covered by the basic health insurance plan that we automatically get as residents but you should check)

3. Evacuation insurance. MEDEX evacuation insurance is available at no cost through the University Benefits office (434-924-4392)

4. Vaccinations and other preventive medicine issues:
   b. Many African countries require proof of yellow fever vaccination (the traveler’s clinic will provide you with a yellow World Health Organization immunization card detailing your vaccinations); lasts 10 years.
   c. Can be done at traveler’s clinic, a walk-in clinic like FirstMed, or the health department. The health department is usually the least expensive, but you must have a prescription for the appropriate vaccinations.
   d. Check to see if the housestaff office is willing to help with this bill as it can get fairly expensive and often it’s not covered by insurance. If you are applying for a grant to help pay your expenses, then be sure to include the cost of vaccinations in your budget.
   e. Malaria prophylaxis if appropriate.
   f. Appropriate antibiotics for traveler’s diarrhea.
   g. Antiretroviral therapy if you will be at risk for occupational exposure.

5. Check to make sure you are not traveling to a site that is an official “travel warning” site ([website: http://travel.state.gov/](http://travel.state.gov/)). You may not travel to the country if it has a “travel warning” from the state department, even if everything has been set up.

**Approval from UVA GME**

1. This is important to maintain your salary and health benefits while you are gone. You must submit the GME paperwork at least 90 days from your departure date and the next GMEC meeting. The forms are on-line at the [GME web site](http://www.gme.virginia.edu).

2. The contact person at the GME office is Sarah Oh at (434) 243-7346.

3. You will need to have a mentor from both UVA and abroad.

4. The mentor from abroad will need to send a letter of intent and CV for you to submit to the GME.

5. You will need to document approval from the International Studies Office as part of your GME application.

6. You will need to confirm that you have medical evacuation insurance provided through GME.

**If You Will be Conducting Research Study Abroad**

1. Take the [IRB on-line training session](http://www.irb.virginia.edu) (takes at least 1 hour)
2. Submit research proposal to the IRB at UVA as well as the institution where you will be working. Each country may have different requirements.

3. Keep in mind that a research project that you prepare before you go may not work because of resource restraints or other restraints that you cannot predict, so BE FLEXIBLE.

4. It is helpful to have a laptop computer that you can travel with to work on your project. You can get up to a 12% discount on Dell computers at our bookstore.

**Travel and Other Hints**

1. Make sure your passport is up to date (should not expire within 6 months of your return).
   a. If not, download forms for renewal or new passport at: [http://travel.state.gov/passport/passport_1738.html](http://travel.state.gov/passport/passport_1738.html)
   b. You will need two 2” x 2” passport style pictures
   c. Takes about 10-12 weeks or longer.

2. You may also need a visa.
   a. Check the respective embassy site for requirements and possible forms
   b. You will need two passport style pictures for this as well
   c. You will need to send your up to date passport, so make sure you’ve renewed your passport before submission.

3. It is helpful to register with the US embassy in the country where you will be working so that in the case that the country becomes unstable, the embassy can help you with evacuation. This is easily done on the following website: [http://travel.state.gov/travel/tips/registration/registration_1186.html](http://travel.state.gov/travel/tips/registration/registration_1186.html)

4. Talking to residents or students who have already traveled to the site can provide invaluable insight on the rotation experience and more practical aspects such as finding a place to live, or good food

5. Many residents have remarked that the medical students and colleagues whom they have met during their international rotations are very interested in learning from our residents. Please consider what topics you might like to present on while on your rotation. Commonly requested topics include: ECG interpretation, diabetes management, hypertension management, and Chest X-ray interpretation. Your presentations will probably have to be modified to fit the environment, but they are a great way to reciprocate for the great experience that you are having.

6. Remember that you will be asked to present on your rotation once you return. This requirement is a form of evaluation for you and should also provide your assessment of what the next steps are at the site. Is this the kind of site that more students/residents should travel to? Are there specific service or research projects that might be undertaken collaboratively? Having pictures (not necessarily of patients – unless, obviously, they give their permission) and case studies help make presenting a lot easier!
Refugees and Vulnerable Populations

Rotation Coordinators: Fern Hauck M.D. PIC 3997, Julia den Hartog M.D. PIC 6911; Amy Brown M.D. PIC 3378
Number of residents for any one session: Open to 1 resident from Internal Medicine or Pediatrics from the Global Health Leadership Track only.
Schedule: Two-week rotation available throughout the year depending on availability in International Family Medicine Clinic (IFMC)
Location: UVA and assorted clinics and offices in Charlottesville

Schedule
The rotation will be offered throughout the year. Fern Hauck will supervise residents in the IFMC. As she also supervises medical students scheduling of the course will depend on her other commitments. The course will involve visits to multiple sites including:

1. IFMC - 2 mornings per week
2. Travel clinic - 1-2 sessions per week
3. STD clinic at the Health Department - 1 session per week
4. HIV clinic (required for pediatrics, optional for IM residents) - 1 session per week
5. International Rescue Committee - 1 session
6. Thomas Jefferson Health District - 2 mornings with public health nurse screening newly arrived refugees, subject to availability
7. International adoption clinic (Pediatrics only)

Sample Schedule:

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Clinical Competencies and Objectives
This course is designed to introduce residents to the health management of vulnerable populations both from abroad and in our own community. This brief course will not fully train residents on the medical care of these populations, but will focus on introducing them to the systems in place to identify and care for them individually and as a community.

Patient Care
Direct patient care will occur in the IFMC, HIV clinic, Traveler’s Clinic, STD Clinic and for pediatrics residents, the International Adoption Clinic. At the IFMC new refugees arrive for their intake exam and established refugees return for their routine medical care. In the HIV Clinic residents will see adult patients with HIV for their routine follow-up visits and initial visits. The Traveler’s Clinic is primarily for people planning trips abroad and residents will work with the Infectious Diseases specialists to counsel travelers and recommend appropriate preventive immunizations and medications. Sexually Transmitted Disease Clinic occurs at the Health Department under the supervision of Infectious Diseases physicians. Here residents will diagnose and treat patients for STDs. The International Adoption Clinic cares for children who have arrived from abroad for adoption. By the end of this rotation, residents will:
(1) be able to evaluate the medical and biopsychosocial issues facing newly arrived refugees
(2) be more familiar with the assessment and management of HIV-positive patients

Medical Knowledge
Residents will gain knowledge in a variety of areas. They will become very familiar with the challenges facing refugees as well as the support systems in place for them. This will occur at the IFMC and the IRC. The international adoption clinic will provide a similar knowledge base as it relates to children adopted from abroad. By the end of this rotation, residents will
(1) improve their skills related to HIV management
(2) improve skills related to STD diagnosis and treatment
(3) become familiar with travel counseling and available resources for travelers and practitioners
Practice-Based Learning
Physical exam skills and laboratory skills such as gram stain will be utilized in the STD clinic. Use of interpreters and cultural competence will be a major component of IFMC clinic. In HIV clinic appropriate use of laboratory testing and effective counseling will be skills developed and learned. By the end of the rotation, residents will:
(1) become more proficient in their physical exam skills related to the evaluation of STD’s
(2) be better able to use interpreters in the care of patients

Systems-Based Learning
Visits to the Health Department and IRC will be focused on education regarding the systems in place to support the vulnerable populations in our community, specifically the refugees. By the end of the rotation, residents will:
(1) understand the systems in place to introduce and care for refugees in our community

Interpersonal and Communications Skills
In working with disadvantaged populations especially those from other countries, sensitive and thoughtful communication is paramount. Central to all clinic work will be the development of these communication skills. By the end of the rotation, residents will:
(1) be better able to use interpreters in the care of patients
(2) better understand the cultural, social and historical issues affecting our disadvantaged and refugee patients

Professionalism
Residents will be working with patients from a diverse background, but will also be working with a variety of community workers including interpreters, IRC workers and professionals at the Health Department. By the end of the rotation, residents will:
(1) be able to work respectfully and professionally with interpreters, social workers, Health Department practitioners and patients from many different backgrounds

Disease Mix & Patient Characteristics
The disease mix will be quite varied in IFMC, from healthy initial visits to acute medical problems. Likewise, patients at HIV clinic will range from stable follow-up visits to patients with complicated sequelae of HIV. Patients at the Traveler’s Clinic are normally healthy. Patients will be from a wide range of ages and cultures.

Clinical Procedures
There will be minimal procedures in this rotation. There will likely be pelvic and genital exams at STD clinic as well as laboratory work such as urinalysis and microscopy.

Supervision: The resident will be under the supervision of various UVA physicians for the clinical portions of the rotation. This will include:

Fern Hauck - IFMC
Rebecca Dillingham - HIV clinic
Erik Hewlett and Tania Thomas - Traveler’s Clinic
Mark Mendelsohn - International Adoption Clinic
Joshua Eby and Cirle Warren - STD clinic

Evaluation
Rotation goals and objectives will be reviewed with Residents prior to commencement. Residents will be given verbal feedback on their performance as well as a written evaluation using the New Innovations on-line evaluation tool. Residents will evaluate their attendings and the rotation itself, also using New Innovations.

Reference List:
Journal articles


Other pediatric-specific resources:


Helpful websites

The World Health Organization: http://www.who.int/en/
  • International health guidelines, policies and statistics.

The Centers for Disease Control and Prevention: http://www.cdc.gov/travel/

US State Department: http://travel.state.gov/
  • Travel warnings, guidelines, visa information

The International Rescue Committee: http://www.rescue.org/
  • Information on global humanitarian aid and refugee resettlement programs

The Baylor AIDS International Initiative: http://bayloraids.org
  • Wealth of information on HIV/AIDs, case studies, etc.