

Competency-based Goals and Objectives for Educational Experience

NIH Inpatient Pediatric Endocrinology Service

Patient Care

At the NIH, we take care of a large cohort of patients with congenital adrenal hyperplasia (CAH). These patients present with complex problems due to an impairment in cortisol and aldosterone production along with androgen excess.

Goal: All fellows are expected to provide patient care that is compassionate, appropriate, safe, and effective for the evaluation and treatment of these patients.

Objectives:

1. First year fellows are expected to gain experience in the diagnosis, management, and counseling of patients with CAH.
2. First year fellows need to develop medical history taking skills relevant to children with CAH (e.g., asking about changes in growth velocity, mood, potential side effects of treatment).
3. First year fellows need to acquire skills in performing physical examination focusing on the entire endocrine system, and specifically on the effects of hyperandrogenism (e.g., genital exam – including assessment for adrenal rest tissue, measurement of height, documenting acne and hirsutism using the Ferriman Gallwey score)
4. Second year fellows are expected to have gained advanced knowledge in the diagnosis, management, and counseling of these patients. They should be able to obtain the medical history, perform the physical examination, order necessary laboratory tests, and suggest appropriate changes of the medical treatment with limited input of the attending physician. However, supervision should continue to be direct or indirect with direct supervision immediately available.
5. Third year fellows are expected to have gained sufficient training and exposure to patients with CAH to perform the above mentioned tasks in an independent manner, though always supervised at least indirectly and/or with oversight. Third year fellows should feel comfortable to skillfully diagnose, treat and care for patients with CAH in a manner that simulates completely independent patient care.

Learning Activities:

1. Direct patient care.

Evaluation Methods:

Competency	Assessment method	Evaluator(s)
Patient Care	Direct observation Record/chart view	Faculty Member Patient/Family Member Program Director Self

Medical Knowledge

Goal: Fellows will develop in-depth knowledge about adrenal physiology, development, and conditions such as CAH. This knowledge and information needs to be consistently applied to patient care.

Objectives:

1. First year fellows are expected to develop knowledge base about diagnosis, differential diagnoses, appropriate laboratory testing, bone age assessment and treatment of CAH.
2. Second- and third-year fellows are expected to build on their knowledge base and expand it to incorporate the latest scientific results and studies, and to identify unmet needs that require further research.

Learning Activities:

1. Expand direct patient care inspired learning by studying textbook material, current scientific publications and by discussing patients with the CAH research team. Present at case conference to learn through teaching.

Evaluation Methods:

Competency	Assessment method	Evaluator(s)
Medical Knowledge	Rotation evaluation	Faculty Member Program Director Self
Medical Knowledge	In-training Examination	Faculty Member Program Director
Medical Knowledge	Multisource assessment	Faculty Member Program Director Self

Systems-based Practice

Goal: Fellows are expected to develop an awareness of and responsiveness to the larger context and system of health care and demonstrate the ability to effectively call on system resources to provide care that is of optimal value. This is especially relevant because experimental treatment approaches at the NIH (i.e., continuous subcutaneous administration of hydrocortisone in patients with CAH) need to be translated into 'real world' treatments that are feasible, applicable, and safe. Furthermore, patients with CAH frequently need multi-specialty care (e.g. urogenital surgery) provided at other medical centers than the NIH. This needs to be carefully coordinated.

Objectives: applicable to first, second and third year fellows:

1. Develop and implement multi-specialty care plans and communicate disease-related issues to families and other care providers.
2. Utilize tools to ensure and improve patient safety (Safety Tracking and Reporting System (STARS) and root-cause analyses).
3. Develop awareness about health care system limitations and integrate factors such as cultural and geographical conditions.

Learning Activities:

1. Direct patient care, participation in patient safety systems review, attend multi-specialty conferences.

Evaluation Methods:

Competency	Assessment method	Evaluator(s)
Systems-based practice	Rotation evaluation	Faculty Member Program Director Self
Systems-based practice	Record/chart view	Faculty Member Program Director

Practice-based learning and Improvement

Goal: Fellows will develop life-long learning skills, personal reflection, and professional integrity to self-evaluate their patient care practices, identify areas of weakness and error, and improve patient care practices.

Objectives: applicable to first, second- and third-year fellows:

1. Refine clinical management skills and integrate standards of evidence-based practice.

2. Participate in QA/QI project.

Learning Activities:

1. Direct Patient Care, Clinical Case Conference, Endocrine and Clinical Center Grand Rounds, Morbidity and Mortality Conferences

Evaluation Methods:

Competency	Assessment method	Evaluator(s)
Practice-based Learning & Improvement	Rotation evaluation	Faculty Member Program Director Self
Practice-based Learning & Improvement	Multisource assessment	Faculty Member Program Director Self
Practice-based Learning & Improvement	Record/chart view	Faculty Member Program Director

Professionalism

Goal: Fellows are expected to develop and strengthen professional skills, adhere to ethical principles, and demonstrate sensitivity to a diverse patient population.

Objectives: applicable to first, second- and third-year fellows:

1. Develop skills for respectful and effective verbal and non-verbal communication especially in situations of great complexity and high stress.
2. Apply e-mail etiquette, display punctuality and work appropriate dress code.

Learning Activities:

1. Direct patient care
2. Attending NIH CC sponsored ethics conferences and completing obligatory ethics on-line training
3. Participating in activities sponsored by the Office of Intramural Training and Education on inclusion, antiracism and wellness
4. Attending NICHD's 'diversity luncheon'
5. Participating in multi-week course on Conduct of Research in the Intramural Research Program at NH

Evaluation Methods:

Competency	Assessment method	Evaluator(s)
Professionalism	Rotation evaluation	Faculty Member Program Director Self
Professionalism	Multisource assessment	Faculty Member Program Director Self

Interpersonal and Communication Skills

Goal: First year fellows are expected to develop and second/third year fellows to enhance interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of the health care team.

Objectives:

1. First year fellows: Together with the responsible attending and the research team, counsel individuals and families regarding test results, prognosis, and possible therapeutic interventions.
2. Second- and third-year fellows: With gradually increasing independence and eventual indirect supervision, counsel individuals and families regarding test results, prognosis, and possible therapeutic interventions.

Learning Activities:

1. Direct Patient Care, Multidisciplinary/QA rounds, written reports, Grand Rounds, activities sponsored by the Office of Intramural Training and Education.

Evaluation Methods:

Competency	Assessment method	Evaluator(s)
Interpersonal & Communication Skills	Rotation evaluation	Faculty Member Program Director Self
Interpersonal & Communication Skills	Multisource assessment	Faculty Member Program Director Self