Developing a Competency-Based Curriculum Worksheet

Needs Assessment (Background)

What do the residents NEED to learn? And why?

1) Nutrition management of the child, teen, young adult with diabetes.
2) Advanced skills in insulin dose adjustment.
3) Advanced skills in insulin delivery.
4) Management of acute hypoglycemia episodes in the child, teen, and young adult with diabetes.
5) Management of acute hyperglycemia in the child, teen, young adult with diabetes.
6) Pathophysiology of fuel metabolism during exercise in the child, teen, young adult with diabetes.
7) Pathophysiology of the effect of exercise on blood glucose values.
8) Psychosocial support of the child, teen, young adult with diabetes.

WHY?

Short term goal: Residents will be the 24/7 caregiver/medical support for 10-12 children and 4-6 young adults with Type 1 Diabetes during this exceptional experience.

Long term Goal: To understand first hand the problems encountered in taking care of a child, teen, young adult with Type 1 Diabetes as part of an Endocrinology or Outpatient Elective curriculum that focuses on a broad-based understanding of the impact of chronic illness on patients and their families.

Rotation Description

Give residents an overview of what to expect.

Each resident will be responsible for the insulin dosing and care of 10-12 children and 4-6 young adult counselors with Type 1 diabetes from Sunday, July 31, 2011.
through Saturday, August 6, 2011. Residents will sleep in the cabin with their group of children, in an adjoining room. No cell phones, no TV, no computers. The camp is on several hundred acres in Ohio farmland country. The resident will accompany the child on all activities throughout the day. The resident will keep an accurate and legal medical record of all insulin dosing, carbohydrate count, and activity record for each child.

Blood glucose testing and insulin/diet adjustment prior to breakfast, lunch, dinner and three snacks. Two sets of activities after each meal. Trouble shooting all medical and non medical emergencies. There is a mandatory training day on the Saturday prior to camp (August 2, 2014), starting at 0800 AM at Camp Joy Outdoor Education Center, in Clarksville, Ohio. Activities include but are not limited to swimming, rafting, high ropes course, crafts, nature walks, group games.

There is a mandatory training day on the Saturday prior to camp (August 2, 2014), starting at 0800 AM at Camp Joy Outdoor Education Center, in Clarksville, Ohio. Support staff include on-site 24/7 Medical Director, 24/7 Nursing Director, 24/7 nursing staff, 24/7 Certified Diabetes Educators, 24/7 dieticians, 24/7 counselor staff.

**Rotation Goal**

Provide a broad, overreaching statement that describes what the learner will gain from the instruction.

The resident will gain an understanding of the interplay between insulin, diet, and exercise in the achievement of glycemic control in the very active child, teen, and young adult in a camp setting where the resident will be the primary care giver. The resident will also learn the power of the team approach and will function as an active member of the medical team who are responsible for the medical care and safety of a camp of 150 campers with Type 1 diabetes; 60 to 70 teen and young adult counselors with Type 1 diabetes; along with 10-15 nurses, 3 psychologists; and about 10 to 15 other resident physicians including a Medical Director and Nursing Director.

**Objectives**

The knowledge, skills and attitudes residents should acquire for each rotation or educational experience and each level of the residency program: “The (specify level) resident (will do- action verb) (what) as measured by (type of assessment).”

**Medical Knowledge:**
All levels of Pediatric, Med-Peds, and Emergency Medicine Residents, and Endocrinology Fellows will benefit from this rotation. The goals reiterated from above include:

A) Nutrition management of the child, teen, young adult with diabetes.
B) Advanced skills in insulin dose adjustment.
C) Advanced skills in insulin delivery.
D) Management of acute hypoglycemia episodes in the child, teen, and young adult with diabetes.
E) Management of acute hyperglycemia in the child, teen, young adult with diabetes.
F) Pathophysiology of fuel metabolism during exercise in the child, teen, young adult with diabetes.
G) Pathophysiology of the effect of exercise on blood glucose values.
H) Psychosocial support of the child, teen, young adult with diabetes.

The Pediatric, Emergency Medicine, Med-Peds, and Endocrinology Fellows must demonstrate knowledge of established and evolving clinical treatments as outlined above, as well as the ability to apply this knowledge to the daily care of the child, adolescent or teen with Type 1 or Type 2 diabetes in the Camp Setting. This will be measured by direct observation and direct mentoring of each participant. There will also be a post camp testing module.

Patient Care:
The Pediatric, Emergency Medicine, Med-Peds, and Endocrinology Fellows must be able to provide patient care 24/7 that is compassionate, appropriate, and effective for the treatment of both diabetes-related and non diabetes-related health problems encountered during the week of camp. This will be measured by direct observation and direct mentoring of each participant. There will also be a post camp testing module.

Systems Based Practice:
The Pediatric, Emergency Medicine, Med-Peds, Endocrinology Fellows must be able to provide patient care 24/7 that is compassionate, appropriate, and effective for the treatment of both diabetes-related and non diabetes-related health problems encountered during the week of camp. Most especially in this setting, participants will need to work
in interprofessional teams to enhance patient safety and improve quality of care as well as to participate in identifying system errors and implementing systems solutions. This will be measured by direct observation and direct mentoring of each participant. There will also be a post camp testing module.

**Practice Based Learning and Improvement:**
The Pediatric, Emergency Medicine, Med-Peds, Endocrinology Fellows must demonstrate the ability to investigate and evaluate the care of their patients 24/7 for the week of camp. They will need to continuously improve patient care based on constant self-evaluation of their treatment throughout the week in the camp setting. Most especially in this setting, participants will need to identify strengths, deficiencies, and limits to their own knowledge, and learn who to ask for help. Also they will need to participate in the education of patients, families, other residents and students, and other health professionals. This will be measured by direct observation and direct mentoring of each participant. There will also be a post camp testing module.

**Professionalism:**
The Pediatric, Emergency Medicine, Med-Peds, Endocrinology Fellows must demonstrate a commitment to performing professional responsibilities for the campers and counselors under their care and guidance and maintain an adherence to ethical principles. They are expected to demonstrate compassion, integrity, and respect for others and for the environment. They are expected to maintain patient privacy and autonomy in the situation of the large and close-knit community of a camp setting. They are expected to demonstrate sensitivity and responsiveness to a diverse patient population with regards to age, gender, culture, race, religion, disabilities, and sexual orientation. This will be measured by direct observation and direct mentoring of each participant. There will also be a post camp testing module.

**Interpersonal and Communication Skills:**
The Pediatric, Emergency Medicine, Med-Peds, Endocrinology Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals
and students. Most especially in this setting, the participants must maintain comprehensive, timely, and legible medical records each day that can be discussed with the Medical Director on a daily basis, shared with parents at the end of the week, and archived with the ADA for future needs. This will be measured by direct observation and direct mentoring of each participant. There will also be a post camp testing module.

**Teaching Methods:**

- **List at least three:**
  1) Didactic / classroom sessions for 8 hrs on July 30, 2011.
  2) One-on-one teaching with Medical Director and Nursing Director and CDE and dietician throughout the week of camp.
  3) Experiential/ hands-on care of their cabin group. For one week.

**Supervision:**

How is the resident supervised during this rotation or educational experience?

Twenty-four/ seven presence of Medical Director, Teresa Andreone, MD, PhD, Associate Professor of Pediatrics (board certified) and Peds Critical Care (board certified) at Saint Louis University. Medical Director of American Diabetes Association-sponsored Camp Korelitz since summer 1996. PALS and ACLS and Trauma certified. Ohio and Missouri Medical License.

Twenty-four/ seven presence of Nursing Director, Laura Hatcher, RN, CDE, and APN

**Educational Resources:**


**Assessment Methods:**

Use multiple methods.

1) One-on-one evaluation by Medical Director, Nursing Director, Program Director, and Camp Director.

2) Review of medical records for each camper and counselor by Medical Director and Nursing Director.

3) Post-camp parental feedback.

4) Post Camp Test

**Program Evaluation:**

How is this rotation or educational experience evaluated?

Post camp questionenre.