



Assessing General Pediatric Knowledge During Post-graduate Training



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Why Assess Knowledge?

- ◆ Knowledge is not the only competency we need to assess
 - ◆ Communication skills, patient care, etc.
 - ◆ But it is NECESSARY for safe practice
- ◆ Assessment of knowledge can positively impact training
 - ◆ Training impacts the quality of care!
- ◆ Faculty and students working together to improve knowledge





Benefits of Testing

◆ Faculty benefits

- ◆ Gauge trainee acquisition of knowledge
- ◆ Feedback on areas needing remediation
- ◆ Help direct didactic training

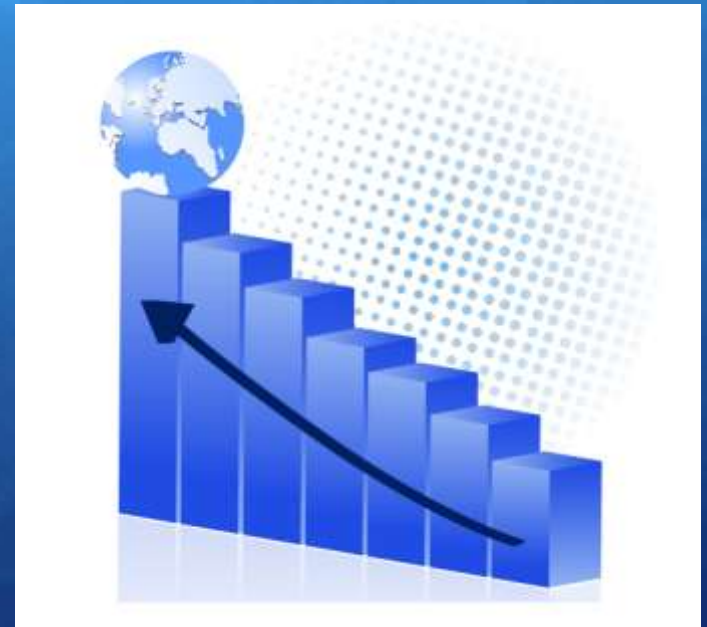
◆ Trainee benefits

- ◆ Feedback on areas of weakness and strength
- ◆ Assurance for final examinations



International In-training Examination (I-ITE)

- ◆ Baseline of **general pediatrics** knowledge
 - ◆ Annual evaluation
 - ◆ Each level of training
 - ◆ Administered at beginning of academic year





Benefits of the I-ITE

- ◆ Internet delivery
 - ◆ Deliver in your own institution
 - ◆ Easy to set up
 - ◆ Secure administration

- ◆ Flexible scheduling
 - ◆ Six monthly windows
 - ◆ www.abp-intl.org

- ◆ Affordable fees
 - ◆ Differential pricing based on WB figures

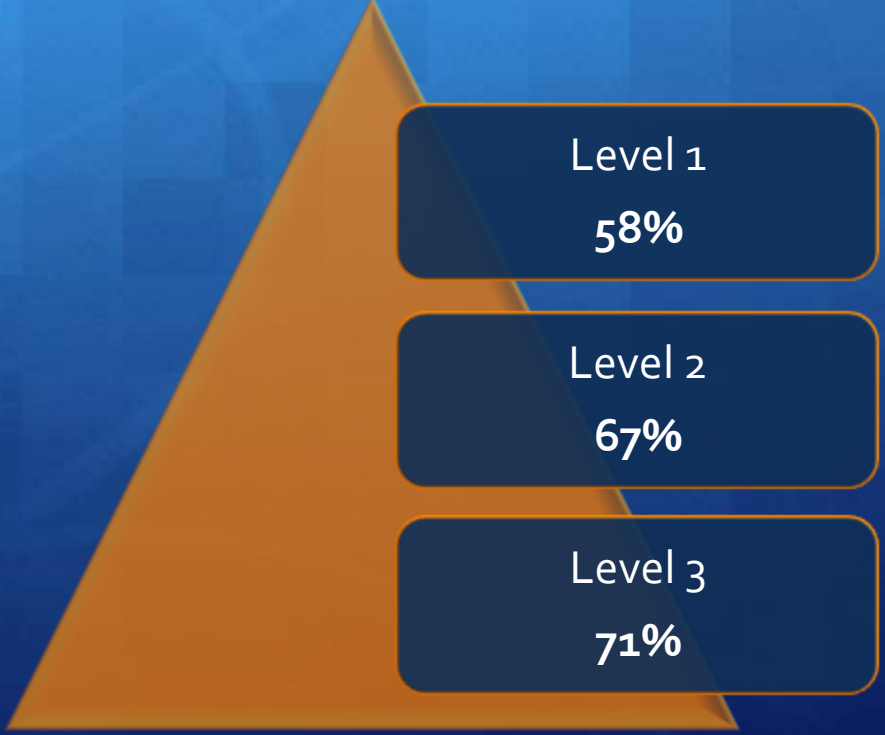
- ◆ Comprehensive reports
 - ◆ Faculty and trainee reports



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Progression of Knowledge with I-ITE

- ◆ Should see increase in knowledge acquisition throughout training
- ◆ Base of knowledge increases with training



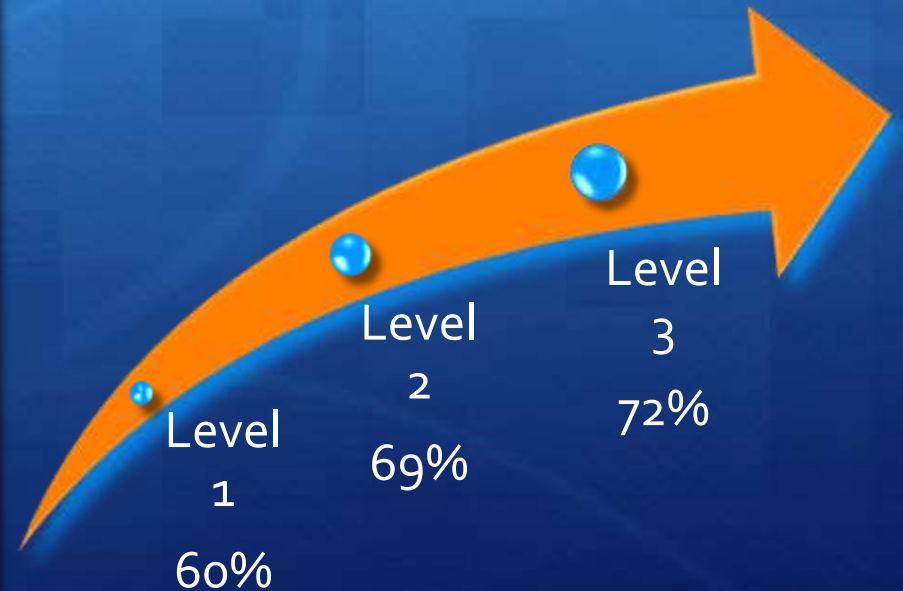
Level 1
58%

Level 2
67%

Level 3
71%

Relationship with US Board Certification

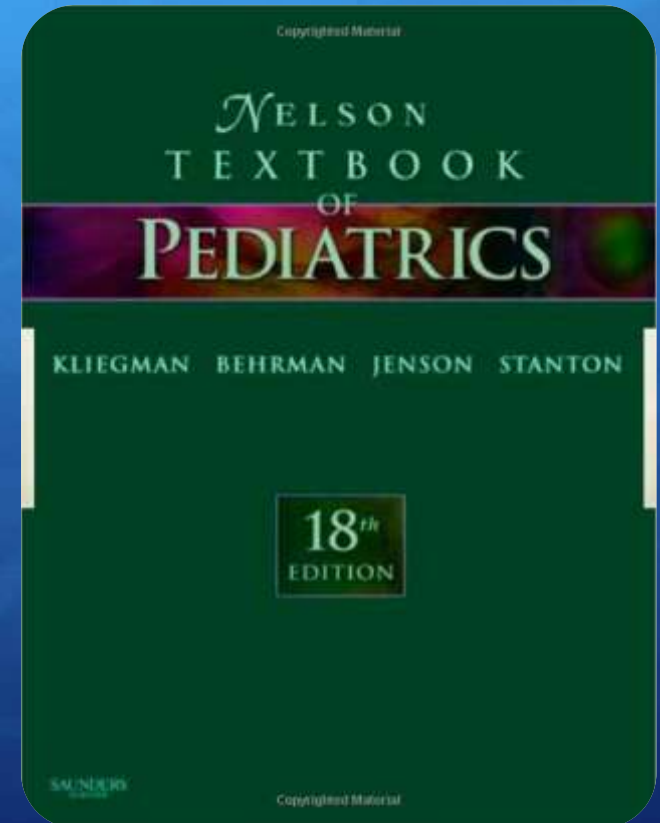
- ◆ 90% of residents achieving these scores pass the US board exam their 1st attempt
- ◆ Helps faculty and residents gauge readiness for board certification



THE AMERICAN BOARD OF PEDIATRICS®
CONTENT OUTLINE


General Pediatrics

Certification Examination
2010



Content of the I-ITE

- ◆ 200 Multiple-choice Questions
 - ◆ MCQ is most efficient way to access knowledge
 - ◆ Subset of items from the US board certification exam
 - ◆ Clinical Vignettes



US Board Certification
Examination
(600 questions)

In-training
Examination
(200 questions)



Exam Development

- ◆ 30 board-certified experts
 - ◆ Trained question writers
- ◆ 2 years to develop an examination
- ◆ Approximately 10 reviews
 - ◆ Physician and technical editors conduct all reviews
- ◆ We assure cultural relevance



A previously well 5-year-old boy has generalized pruritus and rash of two weeks' duration. Examination reveals scattered, excoriated, crusted, erythematous papules on the arms, axillae, groin, palms, and soles, and between the fingers.

These lesions are most consistent with

- A. bullous impetigo
- B. rhus dermatitis
- C. papular urticaria
- D. scabies
- E. atopic dermatitis

Sample Item

Irritability and dyspnea develop in a 3.5-kg, 48-hour-old infant. The infant also begins to consume less formula per feeding and becomes dyspneic while sucking. On examination, pulse rate is 180/min, respiratory rate is 60/min, and blood pressure is 100/60 mm Hg. A gallop cardiac rhythm is heard. Hepatomegaly is present.

Which of the following is the most likely diagnosis?

- A. Tracheoesophageal fistula
- B. Bronchopulmonary dysplasia
- C. Congestive heart failure
- D. Sepsis
- E. Galactosemia

Sample Item

**The American Board of Pediatrics
2009 General Pediatrics International In-training Examination
Result Roster**

Program: **University of XXXXXXX**

| Name | Training Level | Percent Correct |
|-------------|---------------------------|------------------------|
| Student 1 | 2 | 66 |
| Student 2 | 2 | 62 |
| Student 3 | 2 | 57 |
| Student 4 | 2 | 73 |
| Student 5 | 3 | 69 |
| Student 6 | 3 | 58 |
| Student 7 | 3 | 69 |
| Student 8 | 4 | 55 |
| Student 9 | 4 | 63 |
| Student 10 | 5 | 62 |
| Student 11 | 5 | 54 |
| Student 12 | 5 | 61 |
| Student 13 | 5 | 57 |

End of Report

**2009 General Pediatrics International In-training Examination
United States by Country by Program**

| Training Level | | United States Programs | Your Country's Programs | University of XXXXX |
|-----------------------|------|-------------------------------|--------------------------------|----------------------------|
| Level 1 | N | 2993 | 299 | 6 |
| | Mean | 58 | 58 | 55 |
| | Std | 8 | 8 | 7 |
| Level 2 | N | 2955 | 295 | 4 |
| | Mean | 67 | 67 | 65 |
| | Std | 8 | 8 | 7 |
| Level 3 | N | 2818 | 281 | 3 |
| | Mean | 71 | 71 | 69 |
| | Std | 8 | 8 | 6 |
| Level 4 | N | 353 | 353 | 2 |
| | Mean | 72 | 72 | 59 |
| | Std | 7 | 7 | 6 |
| Level 5 | N | 18 | 182 | 4 |
| | Mean | 71 | 71 | 59 |
| | Std | 8 | 8 | 4 |

**2009 General Pediatrics International In-training Examination
Item Response Pattern by Training Level
(percent answering correctly)**

Program: University of XXXX (n=127)

| Question | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 |
|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1 | 43 | 47 | 65 | 60 | 57 |
| 2 | 76 | 80 | 82 | 94 | 91 |
| 3 | 26 | 23 | 30 | 28 | 29 |
| 4 | 55 | 51 | 68 | 74 | 78 |
| 5 | 35 | 50 | 67 | 72 | 71 |
| 6 | 69 | 73 | 83 | 85 | 86 |
| 7 | 85 | 87 | 90 | 89 | 94 |
| 8 | 73 | 76 | 85 | 82 | 78 |
| 9 | 43 | 55 | 68 | 74 | 74 |
| 10 | 22 | 25 | 30 | 32 | 29 |
| 11 | 19 | 23 | 18 | 23 | 22 |
| 12 | 45 | 52 | 65 | 74 | 76 |
| etc... | | | | | |

The American Board of Pediatrics
2009 International In-training Examination
Content Feedback Statements

1. Differential diagnosis of testicular pain
2. Inheritance of fragile X syndrome
3. Management of a patient with syncope on exertion
4. Evaluation of failure to thrive
5. Recognition of congenital syphilis
- 6. Evaluation of esophageal atresia**
7. Recognition of the cause of stupor following substance use
- 8. Recognition of papular urticaria**
9. Evaluation of a patient with myoglobinuria
10. Evaluation of a neonate with vomiting and diarrhea
11. Associated findings in hypoparathyroidism
12. Differential diagnosis of heart failure in congenital heart disease
13. Immunizations in immunocompromised children
14. Cause of immune deficiency, thrombocytopenia, and eczema
15. Management of an athlete following a concussion
16.

Examination Screen Sample

Sample International General Pediatrics In-training Examination - Windows Internet Explorer

https://www.programworkshop.com/ITD/Windows/4.5.8.0/ITDStart.aspx?SVC=60339D2-8B04-4E52-B16F-95B604205cc6

Hazen Ham

Sample International General Pediatrics In-training Examination

Question: 3 of 3 [Go to Question](#)

Time Remaining: 9 min 40 sec

022564pp

A 3-year-old boy is admitted to the hospital with pallor, vomiting, diarrhea, and scattered petechiae. Blood pressure is 112/80 mm Hg.

| Laboratory Findings | |
|---------------------|------------------------|
| Hemoglobin | 9.5 g/dL |
| Blood smear | Burr cells present |
| Platelet count | 52,000/mm ³ |
| Urinalysis | Specific gravity 1.011 |
| Blood urea nitrogen | 74 mg/dL |
| Serum electrolytes | |
| Sodium | 122 mEq/L |
| Potassium | 5.5 mEq/L |
| Chloride | 85 mEq/L |
| Bicarbonate | 20 mEq/L |

He receives 0.2% saline in a 5% dextrose solution intravenously at a rate of 40 mL/hr. Twelve hours later, he has a generalized tonic-clonic seizure, at which time the serum sodium concentration is 117 mEq/L.

ANSWER: Of the following, the most likely cause of the seizure is

- A (A) hyponatremia
- B (B) prerenal azotemia
- C (C) hypertension
- D (D) cerebrovascular accident
- E (E) hemolytic anemia

TABLE

HELP ? BREAK

MARK

BACK

NEXT

Done

Internet

125%

Participating Countries (2010)





How any country can use the program

◆ Administration recommendations

- Beginning of academic year
- All levels of trainees may participate

◆ Internet delivered

- Secure
- Proctored

◆ ABP International Website

- Information
- Schedules
- Download forms



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