

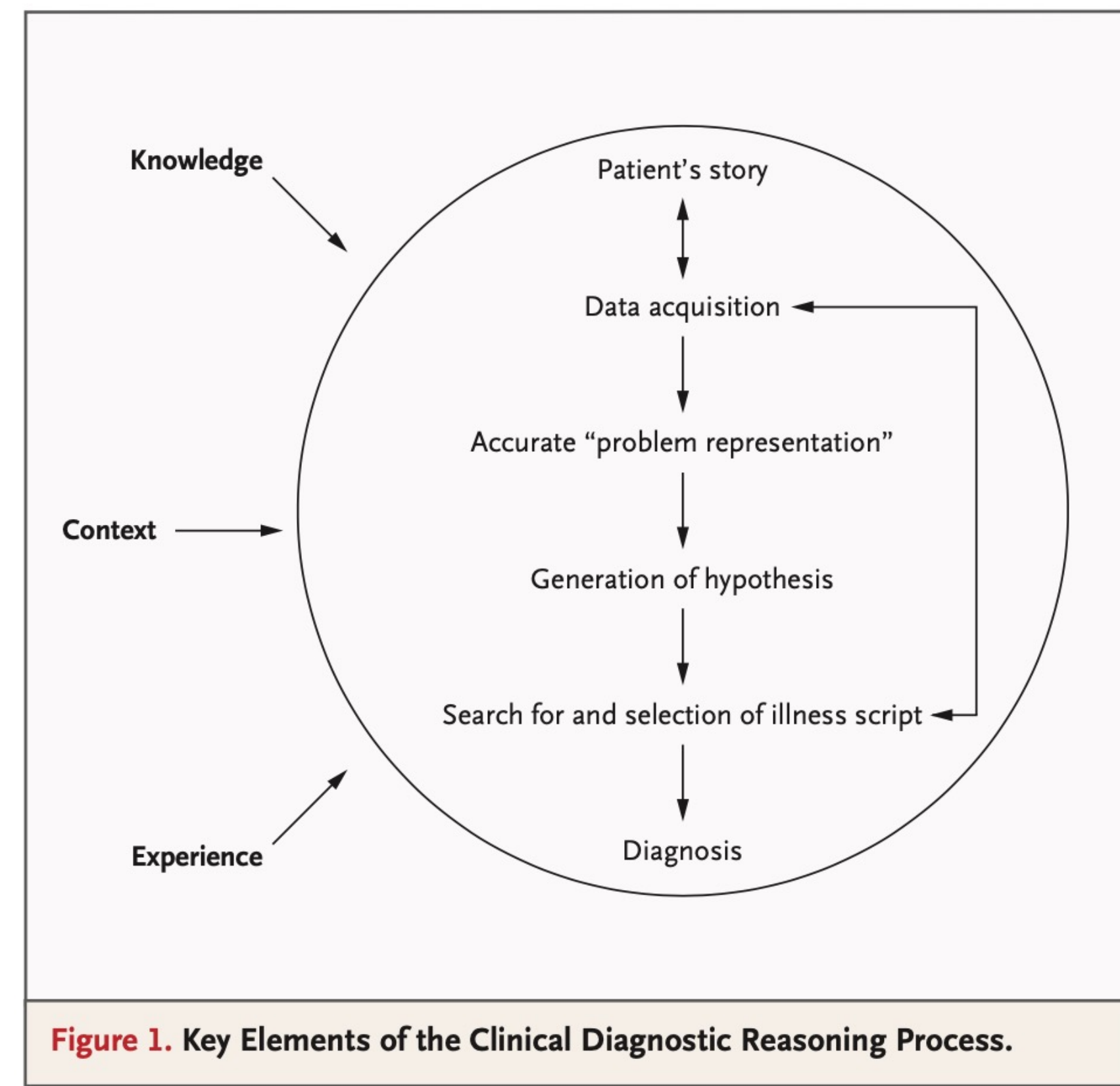
Don't Discount The Differential: A Novel and Reproducible Inpatient Pediatrics Clinical Reasoning Curriculum for Family Practice Residents at Community Teaching Hospitals



PRESENTER:
Gayatri Madduri, MD

BACKGROUND

- Diagnostic accuracy in clinical reasoning relies on illness scripts (IS)
- Trainees accumulate IS through patient care or direct instruction
- FP residents have limited and variable pediatric patient encounters
- Peds hospitalists instruct FP residents
- There is no existing pediatric clinical reasoning curriculum for FP residents



Bowen, JL. Educational Strategies to Promote Clinical Diagnostic Reasoning. N Engl J Med. 2006;355(21):2217-25.

RESEARCH STATEMENT

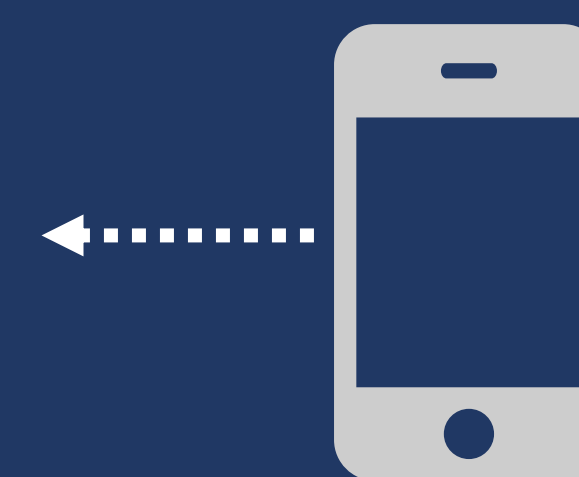
We propose that a clinical reasoning curriculum will facilitate knowledge acquisition of the diagnosis, workup, and management of pediatric:

1. Respiratory Distress
2. Abdominal Pain
3. Fever Without A Source
4. Acute Atraumatic Febrile Limp

This new curriculum uses clinical reasoning to teach trainees about pediatric illnesses.

The curriculum consists of six main components:

- 1. Pre-Test:** A slide titled 'Differential Diagnosis Peds Respiratory Distress' with a QR code and a list of questions for assessment.
- 2. Framework:** A slide titled 'FRAMEWORK' showing anatomical diagrams of the respiratory tract (Upper and Lower) and a table for 'Location of respiratory distress by physical findings'.
- 3. CR Principle:** A slide titled 'DIFFERENTIAL PRIORITIZATION' with bullet points on findings for the lower airway, prioritization of diagnoses, and the goal of clinical reasoning.
- 4. Cases:** A slide titled 'CASE 3' describing a 6-year-old UTD on immunizations with acute onset of cough and tachypnea.
- 5. Illness Scripts:** A slide titled 'WORKSHEET' and 'ASTHMA EXACERBATION' with tables for history/physical exam, workup, and management.
- 6. Post-Test:** A slide titled 'POST-TEST' with a QR code and assessment questions.



Take a picture to download a sample lecture



METHODS

Figure 1. Lecture Design

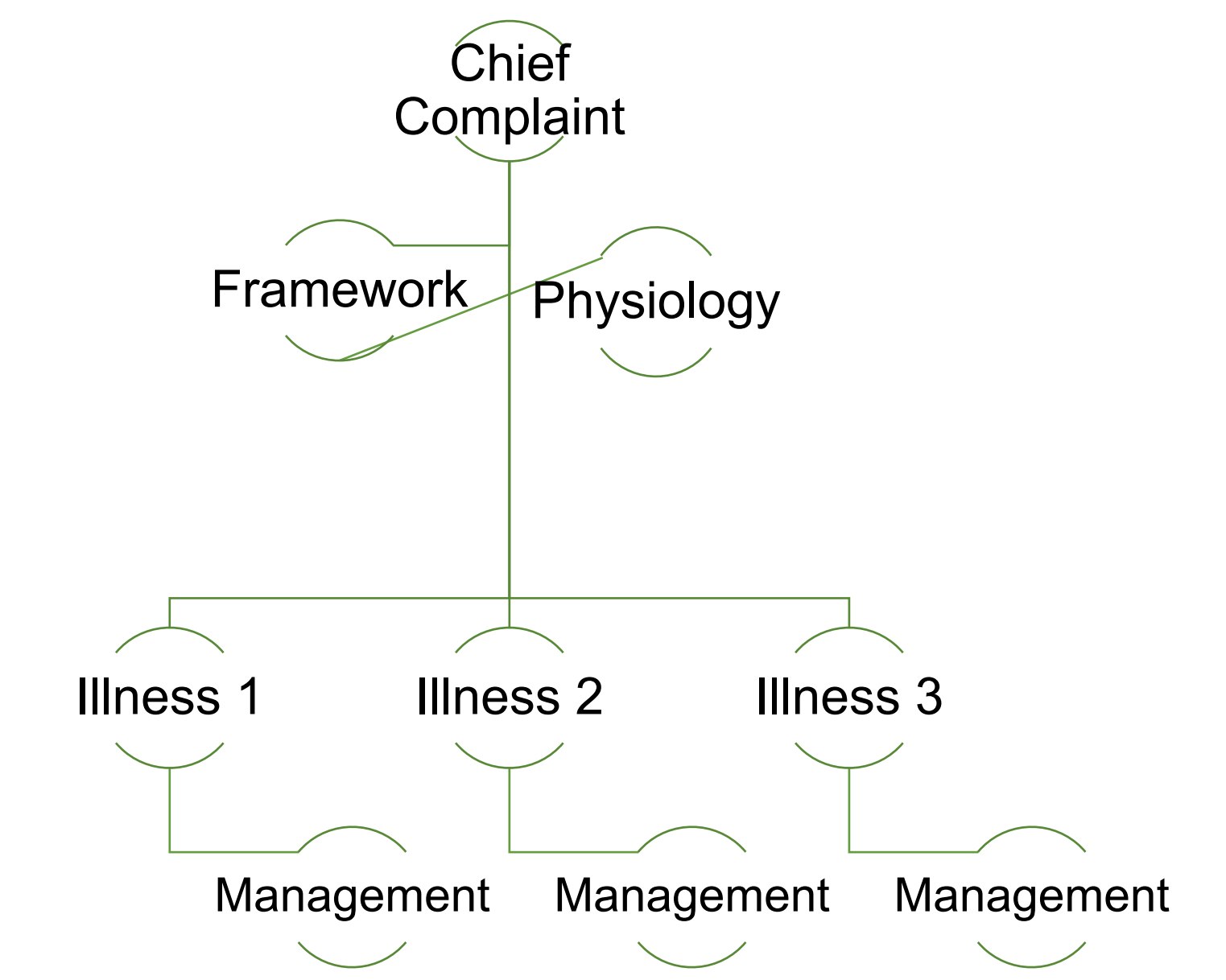


Table 1. Learning Strategies

Step	Learning Strategy
Pre-Test	Activate prior knowledge with case examples
Framework	Direct instruction of a framework to organize the differential diagnosis for a given chief complaint
CR Principle	Direct instruction of a core clinical reasoning principle that applies to the lecture
Cases	Effective questioning compares and contrasts case examples applicable to the chief complaint
Illness Scripts	Graphic organizers, effective questioning, and direct instruction compares and contrasts illness scripts
Post-Test	Formative assessment of knowledge acquisition

Table 2. Key Concepts

Chief Complaint	Framework	CR Principle
Respiratory Distress	Upper vs. Lower Airway	Differential Prioritization
Abdominal Pain	Urgent vs. Non-Urgent	Illness Scripts
Fever Without A Source	Risk of SBI by Age	Problem Representation
Acute Atraumatic Febrile Limp	Presenting Characteristics	Semantic Qualifiers

EVALUATION

1. Learner Pre/Post-Tests
2. Learner Feasibility/Acceptability Survey
3. Hospitalist Feasibility/Acceptability Survey

Spring 2021: Pilot at JMH
Fall21-Spring22: Implementation at JMH/RC

A work in progress - stay tuned!

Gayatri Madduri, MD; Tristan Nichols DO;
Beth Torwekar, MD; Megan Durham, MD

