

# Assessment for Learning: How to Assess Your Learners' Performance in the Clinical Environment

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"Learner assessment" usually refers to assigning ratings and writing comments on forms at the end of a rotation. Although these are important aspects of assessment, assessment can begin the moment a preceptor meets a learner, and it can set the stage for a meaningful learning experience. Whether the time together is one half-day session or several weeks, preceptors who assess their learners' competence, knowledge, and interests "in the moment" can help target their teaching to the learners' goals and needs. This article, which is next in the series by the Council on Medical Student Education in Pediatrics about the skills of great clinical teachers, provides strategies for an "Assessment for Learning."

## ASSESSMENT FOR LEARNING: WHAT IS IT?

Assessment encompasses gathering data about a learner's performance through observation and interactions, providing feedback, recording observations and ratings, and synthesizing data to make summary recommendations about a learner. Assessment for learning, sometimes called formative assessment, includes those aspects of assessment that shape the learner's abilities.<sup>1</sup> Clinical teachers are ideally suited to assess for learning in clinical work environments, beginning in the

first moments when meeting a learner.<sup>2</sup>

The benefits of assessing a learner's knowledge, abilities, and goals at the beginning of a teaching interaction include the following:

1. Preceptors are better able to teach to the learner's level and help them progress.
2. Preceptors are better equipped to help the learner address individual learning goals.
3. Preceptors can help prepare an "educational sign out" or "teaching handover" that they, or the learner, give to the next preceptor to allow both the teacher to be prepared and the learner to continue their learning trajectory.<sup>3</sup>
4. Preceptors are better able to write high-quality, helpful narrative comments, facilitating future learner progress and assisting clerkship directors and grading committees in monitoring learners' progress.<sup>4</sup> When making some quick observations and assessments in the moment, a preceptor can use them in real time to teach but then also scribble a quick note. Then, when it comes time to complete an evaluation form, the preceptor can use the notes to provide specific examples in comments for summative assessment.



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## STRATEGIES FOR ASSESSMENT FOR LEARNING

### Elicit Goals

Course objectives and evaluation forms are a great place to begin the conversation about learning goals because they provide a framework and clear outline of expectations. Preceptors and trainees can devise a plan of which topics to focus on during the clinical experience. Inquiring about personal interests, career goals, and learning goals (eg, specific physical examination techniques, presentation skills, or clinical reasoning) can also help guide and individualize teaching while providing insight into the learner's approach to self-assessment.

### Use Direct Observation

Although it may not be realistic to observe learners doing all their clinical work, observations can focus

on parts of the history, specific physical examination skills, interacting with patients, sharing information with families, or coordinating with team members. Observations of even a few minutes will add insight about current performance and appropriate next steps.<sup>5,6</sup>

### Assess While You Teach

While caring for patients together, preceptors can focus the learner on specific patient care goals by asking, "What is the most important thing we need to know about this patient to help us determine the best management plan?" (For some patients, it is the presence or absence of fever, results of blood tests, evolution of a rash, or need for oxygen.) The student's reply can assist the preceptor in determining how the learner is approaching clinical reasoning for this patient.<sup>7</sup> The preceptor can then adjust the

conversation to the knowledge level of the trainee.

Another approach is "Learn Something New Every Day" rounds. All team members (students, residents, nurses, and preceptors) take turns sharing something they learned recently. For a large team, set a time limit of 60 seconds for each person's "teaching pearl" to keep the discussion short. This strategy allows each team member to practice teaching and also provides an authentic opportunity to model and practice lifelong learning. In addition, this approach gives preceptors an opportunity to assess learners' knowledge, communication skills, and motivation.

Reviewing clinical guidelines or protocols provides another method to both assess and teach in an outpatient clinic, hospital unit, or newborn nursery by encouraging learners to think aloud about why pediatricians do what they do. For example, in the newborn nursery, education about hypoglycemia guidelines can begin with asking learners questions such as, "Which infants are at risk for low blood glucose?"; "Why?"; "What is the pathophysiology?"; "How long would that risk last?" For hyperbilirubinemia guidelines, ask, "Which infants are at risk for jaundice?"; "When or how often do we measure their bilirubin?"; "At what point do we start phototherapy?" This strategy helps preceptors assess learners' understanding of disease process, epidemiology, and rationale for evaluation and management and then guide teaching to the appropriate level for each topic.

Activities as straightforward as discussing a clinical case or an approach to a chief complaint ("2 month old with wheezing" or "15 year old with abdominal pain") can also provide an opportunity to assess the learner's knowledge and clinical reasoning while discussing the differential diagnosis, evaluation,

TABLE 1 Assessment for Learning

Elicit goals
Question to elicit goals
What aspects of pediatrics relate to your career goals and interests?
What knowledge or skill do you hope to focus on during your time in this clinic (or working with this team)?
Use direct observation
Spend several minutes watching the learner care for a patient while assessing a particular skill
History taking (eg, past medical history, family history, or social history)
A physical examination technique (eg, respiratory, abdominal, or ear)
Information sharing (eg, anticipatory guidance or instructions for medications)
Communication skills with patients and families
Coordination of care with team members
Assess while you teach
Ask, "What is the most important thing we need to know about this patient to help us determine the best management plan?"
Use Learn Something New Every Day rounds, in which everyone on the team shares something they have learned recently (in ≤60 s)
Think aloud about clinical guidelines or protocols
Assess clinical reasoning while talking through the differential diagnosis, evaluation, and management plan (about actual patients or hypothetical patients)
Compare the learner's performance to a framework
Summarize observations with the RIME framework: How does this learner primarily function?
Reporter (gathers and presents patient data)
Interpreter (interprets and prioritizes patient data)
Manager (creates a plan for patient care)
Educator (educates self, patients, and team members)
Look to the future
Help a learner set new learning goals
Create a teaching handover with the learner (plans for learning and requesting feedback in the next clinical experience)
Share assessment for learning observations in comments on evaluation forms

and management plan. Learners can ask clarifying questions about the patient, and the teacher and learner can discuss the clinical reasoning of why different diagnoses may be higher or lower on the list depending on the answers.<sup>8</sup>

### Compare the Learner's Performance to a Framework

The reporter, interpreter, manager, educator (RIME) framework provides a practical way to synthesize an assessment while working with a student.<sup>4,8</sup> The RIME framework helps clinical teachers look for patterns in each learner's competence in clinical care. A reliable reporter consistently and accurately gathers the data needed for patient care and presents it in a clear and organized way. An interpreter interprets what the information means for patient diagnosis and care. A manager consistently proposes, discusses, and implements treatment plans. An educator educates himself or herself, patients, or others about each patient's diagnosis and care needs. The RIME framework helps preceptors summarize their observations about the learner's abilities, identify the level in the framework at which the learner generally performs, and outline a plan for improvement.

### Look to the Future

Preceptors who have engaged in assessment for learning are well positioned to help learners create specific goals regarding physical examination or communication skills,

interpretation of laboratory results, knowledge of clinical guidelines and how to apply them, or other aspects of clinical reasoning and care that have been observed, taught, and discussed. Preceptors can assist learners in self-assessing their own learning, articulating refined goals for their next clinical experience, defining specific feedback they can request from another teacher, and determining how they will decide whether they have succeeded in meeting their goals.

### CONCLUSIONS

Assessment for learning, developed and practiced in observations and teaching in the clinical setting, forms a strong foundation for shaping a learner's progress (Table 1). The same observations and guidance for learning form the basis for high-quality comments on evaluation forms, whether the teacher and learner spend a few hours or a few weeks working together. Specific examples of what the learner said and did while caring for patients benefit everyone: the teacher who assesses and guides, the learner who progresses and forms new goals, and the program leader who makes decisions about the learner's readiness for the next steps along the path of education.

#### ABBREVIATION

RIME: reporter, interpreter, manager, educator

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