HOW DO I EXPLAIN THE MILESTONES TO MY LEARNERS AND FACULTY?

APPD/COMESP Annual Meeting

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CONSTRUCTION TEAM

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DISCLOSURE

• None
CONSTRUCTION PLANS

• Overview of Dartmouth approach to Milestones
• Example activities to introduce Milestones
  • Learner self-assessment
  • Faculty deconstructing expertise
  • Faculty preparing for observation
  • Faculty facilitating learner goal setting
  • Faculty and learner designing practice
• Planning to implement one activity at home
Your learners:

Your coaching job: To assess, prepare and ultimately determine their readiness for school.
Developmental Level: Infant

Milestone: Pull to sit without head lag

Subcompetency: Gross Motor Skills
Competency: Childhood Development
PERFORMANCE MILESTONES FOR MEDICAL LEARNERS

A developmentally graduated series of performance standards which lead to the expert performance of a given skill.

Novice -> Advanced beginner -> Intermediate -> Proficient -> Expert

Can be developed for any competency

Examples from our current evaluations:

• Resident end of rotation evaluation
• Medical student observed H&P
• Structured clinical observation
• Simulation activities
• Develop your own related to performance standards in your specialty
COMPETENCIES AND MILESTONES IN MEDICAL EDUCATION

**Competency Domain** - broad categories that group related skills

**Sub-competency** - more specific/discrete skills

**Milestones** - developmental stages (1-5)

**Deconstructing expertise:**
Breaking a skill (sub-competency) down into stages of development (milestones)
COMPETENCIES & MILESTONES

Competency Domain: Practice Based Learning and Improvement
Sub-competency: Incorporate formative evaluation feedback into daily practice

Milestones:

- **Level 1:** Has difficulty in considering others’ points of view when these differ from his or her own, leading to defensiveness and inability to receive feedback and/or avoidance of feedback; demonstrates a limited incorporation of formative feedback into daily practice.

- **Level 2:** Is dependent on external sources of feedback for improvement; is beginning to acknowledge other points of view, but reinterprets feedback in a way that serves his or her own need for praise or consequence avoidance, rather than informing a personal quest for improvement; little to no behavioral change occurs in response to feedback.

- **Level 3:** Understands others’ points of view and changes behavior to improve specific deficiencies that are noted by others.

- **Level 4:** Internal sources of feedback allow for insight into limitations and engagement in self-regulation; improves daily practice based on both external formative feedback and internal insights.

- **Level 5:** Demonstrates professional maturity and deep emotional commitment that lead to deliberate practice and result in the habits of continuous reflection, self-regulation, and internal feedback and that lead to continuous improvement beyond a focus solely on deficiencies.
DISCUSS PERFORMANCE MILESTONES WITH LEARNERS

1. Share the deconstructed milestones for the relevant skill(s)
2. Share your targets/benchmarks for them
3. Share any other performance expectations that you have
4. Ask learners to self-assess and share their current

When does this happen?
- Rotation orientation (expectations, goals and objectives)
- Attending-specific (driven by individual values and style)
- Skill/procedure-related (during the modeling stage)
DOCTOR COACH FRAMEWORK

Performance Observation

Facilitated Practice

Coach’s Assessment

Environment

Goal Setting

Formative Feedback

Milestones

Self-assessment

Summative Evaluation
WHY SELF-ASSESS

• Promotes individualized and goal directed learning
  • Means to track progress towards learning goals
• Reflection
  • Identifies strengths to build off of and areas to improve
• Habits of Life-long Learning
HOW WE DO IT

- In spring, send all 51 sub-competencies to interns
- This past year- it took 20 to 40 minutes to do all of them
  - circle and underline their self-assessment
  - From there, moved directly to individualized learning plans

- Helped the learner get acquainted with what to expect
  - Their comments: "Thanks, now I have a better idea of what to expect in residency."
  - Our residents were more capable of knowing how to do the ILP, having become acquainted with the milestones
LET’S PRACTICE

• See handout with 6 milestones
• Self-assessment—Underline, highlight, and/or circle the skills you have completed

• For the residency leaders who are interested in being involved in an APPD LEARN study involving learner self-assessments of the 21 ACGME sub-competencies
  • Co-PIs: Kim Gifford and Su-Ting Li
  • Please communicate with them and potentially participate if you plan to try this out and home...
USING MILESTONES TO DECONSTRUCT EXPERTISE

LESLIE FALL
“HOW TO BE AN EFFECTIVE KINDERGARTENER”

• Competency Domain:
  • Self Care

• Sub-competency:
  • Tie your own shoes
    • Milestones for learning to tie your shoes
HOW TO TIE YOUR SHOES
PREPARING FOR MILESTONE-BASED OBSERVATIONS

ALISON HOLMES
WHEN AND WHERE DO WE ENGAGE IN OBSERVATION?

• How would you observe competencies other than MK and PC?
• Communication?
• Professionalism?
• Systems-based practice?
• Practice-based learning and improvement?
DIRECT OBSERVATION ACTIVITY

PBL4. Incorporate formative evaluation feedback into daily practice

• Using a blank blocks diagram, place up top a clinical setting where you observe students or residents receiving feedback
• Now, for each milestone level, write down the behavior you would see in your setting that corresponds to each of the milestones for this competency
• When you are done, introduce yourself to someone here you don’t know, and share your descriptions with your new colleague

n.b.: Observation here can be primary or secondary—it can also be talking with a resident about how they handled feedback from someone else (a nurse, a medical student, a parent, the residency coordinator...)

GOAL SETTING USING MILESTONES

CATHY SHUBKIN
WHAT’S IN A GOAL?

• Principals of goal setting
  • Motivation
  • Need
  • Feasibility

• Other important features
  • Environment (autonomy support)
  • Flexibility (revisit your goals)
  • Needs Assessment with self reflection
SMART GOALS

• Specific
• Measurable
• Attainable
• Realistic/Relevant
• Timeline
Sub-competency: Incorporate formative evaluation feedback into daily practice
MILESTONES

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PRACTICE: WORKING WITH A LEARNER

- Think about one of your own learners who has reached Milestone 2 or 3.

- What is skill is most holding the learner back from reaching the next level?

- Set a SMART goal!
  - Use the milestones to write a goal that is Specific and Measurable
  - We will focus on the rest of SMART in the next activity
USING MILESTONES TO DESIGN PRACTICE

LESLIE FALL
MILESTONES HELP YOU INTENTIONALLY DESIGN EFFECTIVE PRACTICE

Individual Skills
- Focus students’ attention on key aspects of skill
- **Shore up the foundation: diagnose weak or missing component skills and isolate practice to address them.**

Complex Skills
- Give students practice designed to increase fluency and integration of individual skills
- **Intentionally practice isolated skill components at various levels of current mastery together at the same time.**

Transfer of skills
- Ask students to apply skills in new or diverse contexts
- **Practice proficient skills in a new setting in order to solidify and refine mastery prior to adding new novice skill components.**
DESIGNING PRACTICE ACTIVITY

Using the feedback milestones:

- Consider your learner at level 2 or 3 and his/her goal that you just started.

- Identify one of the following to practice:
  - **Individual skill**: One skill component to isolate and design practice.
  - **Integrated skills**: Two skill components at various mastery levels (i.e. 1 at novice and 1 at advanced beginner) to isolate and design integrated practice.
  - **Skills transfer**: One different practice setting than your own to design skills transfer practice.
DESIGN A PRACTICE PLAN

• In general, what are the opportunities for practicing this skill set in your setting?

• What are the best practice methods for this learner and this skill at this time?
  • Mentally practice while watching you (modeling)
  • Have you guide them while they practice
  • Practice while you stand aside and observe or supervise
  • Practice independently and then ask you to observe them
IMPLEMENTING A MILESTONES ACTIVITY

1. Select which activity you would like to implement at home
   • Regroup according to selections

2. Brainstorm with your group about ways that the activity could be used in each of your programs

3. Complete an implementation plan (worksheet)
CONSTRUCTION SITES

1. Learner self-assessment (Adam)

2. Faculty deconstructing expertise (Kim)

3. Faculty preparing for observation (Alison)

4. Faculty helping learner with goal setting (Cathy)

5. Faculty and learner designing practice (Leslie)
WRAP-UP

Sharing of ideas with the group