Layered Learning

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Key Concepts

- Layered learning is the synchronous placement of medical students along with other more advanced learners (more senior students or resident physicians), resulting in a student receiving "layers of teaching".
- Layered learning is made possible through the collaboration and trust of everyone involved – learners, preceptors, staff, patients, caregivers, and the wider community.
- While logistical arrangements for space, scheduling, and working with learners will depend on the learners' and clinic's unique strengths and needs, there are some common approaches that can guide preceptors interested in layered learning.

Common Approaches to Layered Learning

With Year 2 Residents (R2) + Year 3/4 Medical Student(s)

While all preceptors should spend some time getting to know their resident and their readiness for teaching, many find that R2s are highly capable of supervising the medical student(s). The preceptor may become more of a supportive resource than an active participant in their patient encounters. For this reason, this combination of learners is often an approachable entry point for preceptors that are new to layered learning environments.

> **What might this dynamic look like in practice?**

A preceptor may keep the schedule on track in one exam room, while the learners see patients as a pair in another. In other cases, the two learners may see the patients, with the preceptor close by to debrief and discuss cases one-on-one between encounters. Even with a highly capable R2, it's good practice to let patients know that they can be seen by the preceptor at the end of their visit, or for the preceptor to pop in at the end to ask the patients if they have any questions.

With R1s + Y3/4 Medical Student(s), or learners of similar skill levels

Especially with less experienced learners, preceptors can offer support by introducing them to the patient at the beginning of their visit. Having the preceptor vouch (when appropriate) for the learner's skills can engender more trust in the learner's abilities. Patients also often appreciate a reassurance that the preceptor will return to speak with them before their visit is over.

> **What might this dynamic look like in practice?**

In clinic environments, space is often a limited resource. Some preceptors have approached managing two learners with two exam rooms in the following ways:

- **Two Learners in Room A + Preceptor in Room B:** The preceptor can maintain the flow of patients while the learners take some extra time for their patient encounter. The preceptor will go over the case with the learners afterwards to finalize the care plan.
- **One Learner in Room A, one learner and the preceptor in Room B**: The preceptor can do 1-on-1 teaching in Room B while the other learner sees a patient on their own in Room A.

- **In both arrangements**, with R1s and medical students, the preceptor should always follow up with the patient after the learners are done. This is a great opportunity for the patient to ask questions or offer feedback about the learners' performance.

In Hospital Settings

Hospital settings can have an advantage over clinic settings as there is generally more physical space. However, some departments may still struggle with space or managing the number of available computers.

> **What might this dynamic look like in practice?**

When you have a large group of learners, the R1s/R2s pair off with the medical students to review cases. Then, the pairs gather again to present the cases to each other and discuss the patient differential with the preceptor present. The preceptor sees the patient, and then the care plan is finalized with the whole team. In this type of approach, the preceptor sees patients while the learners are reviewing cases together, and often the learners will discuss with each other before reviewing with the preceptor in a team setting.

Best Practices

1) *Allow your layered learning approach to develop organically and flexibly*

   Your layered learning approach will evolve over time, as you and your learners get to know each other, grow their competencies, and settle into the clinic's routines and community.

2) *Trust in your learners*

   Trusting your learners' abilities is foundational to layered learning. If you're unsure of how to entrust your learner with independence, a good way to assess their competence is to pair them with a patient you know well who is presenting with a more straightforward request. Debrief with the learner after the encounter and adapt their level of independence and assigned tasks according to the learner's strengths and areas for growth. For medical students, here is the link to the supervisory policy 31B.

3) *Encourage a culture of learning with your residents*

   Residents receive [foundational training in teaching](#) as part of their program and are often eager and ready to teach more junior learners. Teaching is an essential opportunity for residents to build their teaching competency and receive feedback on their approach.

4) *Scheduling with the help of office staff*

   Work with your office staff to coordinate learning. Pair learners with consenting patients of appropriate complexity while you take on other patients to keep to the schedule. Scheduling 5-minute 'catch-up' slots, or utilizing the time freed by patients who cancel, can also be helpful for debriefing learners and addressing delays. Even in clinics where adapting the schedule is not possible due to high patient loads, layered learning has been practiced successfully!

5) *Involve patients as teachers*

   Patients are generally very happy with the increased thoroughness and attention they receive in learning interactions. Invite them to share their questions and observations, as patients can be a great resource for feedback on the learner's performance.

Possible Opportunities for Encouraging Resident Confidence

Aside from patient encounters, residents may also be able to grow their teaching confidence through other activities within the clinical teaching environment. Some suggestions include:

- **Simulation-based Medical Education (SIMs) with students**. This could be a lower-risk space for residents to practice their teaching skills and ask questions.
- **Case presentations with students**. Scheduling that allows all learners to hear each other's case presentation may encourage group learning and confidence in each other.
- **Intentional independence**. Put an R1 in charge of a student for a simple case and have the student present to the R1; or have a resident and student review a simple procedure together.

Resources

Watch the session recording for ICC Breakfast Club – Layered Learning.

Those supervising medical students may wish to review the following infographic for supervisory policy 31B: What Clinical Supervisors and Preceptors Need to Know: Expectations for Supporting Students in Clinical Settings