VMBARS MEDICINE FIELD GUIDE

The Medical Trainee Learning Loop

A practical system for turning experience, feedback, and reflection into better questions, better judgment, and one changed behavior at a time.

PURPOSE

Medical training produces more information and experience than anyone can retain. This guide helps you decide what to notice, convert feedback into action, preserve useful learning without recording protected information, and test whether your behavior actually changed.

The loop

1. Frame	2. Notice	3. Distill	4. Change	5. Test
Set the objective and boundary.	Observe decisions, mechanisms, and uncertainty.	Turn notes and feedback into one usable rule.	Choose a small behavior to practice.	Look for evidence the change worked.

Use it in:

- coursework and exam review;
- research meetings and project work;
- simulation, skills practice, and supervised clinical learning;
- mentorship conversations, team projects, and service experiences.

SCOPE AND SAFETY

This is an educational learning tool, not clinical guidance. Local supervision, protocols, patient safety, consent, confidentiality, and professional standards always take precedence. Never place protected health information or identifiable patient details in a personal learning system.

1. Frame the learning episode

A vague goal such as 'learn more' makes almost everything feel relevant and almost nothing actionable. Before the experience, define the smallest useful learning target and the limits of your role.

Question	What a useful answer does
What am I trying to become able to do?	Names an observable capability, not a topic: explain, distinguish, retrieve, perform under supervision, communicate, or decide when to ask for help.
What do I already think I know?	Surfaces the starting model and the assumptions most likely to be wrong.
What should I pay attention to?	Focuses observation on decisions, information flows, handoffs, tradeoffs, uncertainty, and stakeholder effects.
What is outside my role?	Makes supervision, escalation, consent, safety, and confidentiality constraints explicit.
What evidence would count as progress?	Defines a later test: clearer explanation, fewer repeated errors, better retrieval, stronger questions, or more reliable execution.

Write the frame

By the end of this learning episode, I want to be better able to...

My current model or assumption is...

The boundary I must respect is...

CHOOSE A PRODUCTIVE DIFFICULTY

The target should be challenging enough to reveal a gap and narrow enough to review. If the goal cannot change what you observe or practice today, make it smaller.

2. Notice what experience can teach

Experience does not automatically produce expertise. It becomes useful when you notice the mechanism beneath an outcome and compare what happened with what you expected.

Lens	Look for	Question
Decision	The choice made, information available, alternatives, and threshold for action	What made this the next reasonable step?
Mechanism	The causal or operational explanation connecting action and result	Why should this work here?
Uncertainty	Missing information, ambiguity, changing evidence, and limits of confidence	What remains unknown, and how is that handled?
Feedback loop	The signal that returns, who receives it, and the delay	How will anyone know whether the action helped?
Stakeholders	Who benefits, who does the work, who bears friction or risk	Whose perspective is missing?
Transfer boundary	The context in which the lesson may fail	Where should I not generalize this?

The compact observation record

Expected	Observed	Possible explanation	Question to pursue
What I thought would happen	What actually happened - de-identified	Mechanism, incentive, workflow, or knowledge gap	The smallest question that would improve my model

DE-IDENTIFICATION IS NOT OPTIONAL

Record the principle, mechanism, or question - never names, dates of birth, record numbers, distinctive personal facts, screenshots, copied chart text, or other information that could identify a patient. When uncertain, do not record it and ask your institution what is permitted.

3. Convert feedback into an action

Feedback is easy to collect and easy to waste. The goal is not to agree with every comment; it is to understand the signal well enough to decide what to repeat, stop, change, or investigate.

Ask for feedback that can be used

Weak prompt	Stronger prompt
Any feedback?	What is one thing I should repeat and one thing I should change next time?
How did I do?	Where did my reasoning, communication, or execution become harder to follow?
Was that right?	What information or cue should have changed my approach?
What should I study?	Which gap is most likely to recur, and how would you test whether I fixed it?

Run the feedback-to-action ledger

Feedback or outcome	What may be true	Next behavior	Test date / evidence
State the observation without arguing with it.	Separate the signal from tone, identity, or a single interpretation.	Choose one visible behavior within your control.	Decide when and how you will know whether it improved.

WHEN FEEDBACK IS UNCLEAR OR UNSAFE

Ask for an example. Compare the comment with standards and repeated patterns. Seek a trusted supervisor or institutional channel when safety, discrimination, harassment, retaliation, or professional boundaries may be involved. Adaptation is not obedience.

4. Distill knowledge into a usable card

Notes are not yet a learning system. Distillation converts a source or experience into a compact claim you can retrieve, challenge, and apply.

The knowledge-to-action card

Field	What to record
Question	The problem this card helps you answer.
Claim	Your concise current understanding, in your own words.
Source	Where it came from: lecture, paper, guideline, supervisor, book, meeting, or experience.
Mechanism	Why the claim makes sense; the pathway connecting cause, action, and outcome.
Context	The setting, population, task, or assumptions under which it may apply.
Boundary	What it does not establish; exceptions, uncertainty, contradictions, or need for supervision.
Next behavior	How this should change what you retrieve, ask, explain, practice, or verify.
Review trigger	When new evidence, an error, a conflicting source, or a changed context should reopen the card.

PROVISIONAL IS A VALID STATUS

Do not force every observation into a permanent rule. Label uncertainty, preserve provenance, and keep contradictory evidence visible. A learning system should make revision easier, not make first impressions harder to change.

Draft one card

Question / claim	Source / mechanism
Context / boundary	Next behavior / review trigger

5. Re-enter with one changed behavior

The loop closes only when your next attempt differs. Select a behavior small enough to practice deliberately and visible enough to review.

Setting	Possible changed behavior	Evidence to review
Course or exam	Classify each missed question by knowledge, retrieval, reasoning, reading, or execution error; then change the matching step.	Error recurrence, explanation quality, retrieval under delay, and performance on mixed questions.
Research	End each meeting with the decision, owner, output, deadline, unresolved assumption, and next review point.	Fewer ambiguous handoffs, clearer deliverables, faster identification of blocked work.
Simulation or skills practice	State the objective, narrate the step that causes difficulty, request one specific correction, and repeat under supervision.	Observed execution, ability to explain why, and reduced dependence on prompts.
Supervised clinical learning	Prepare one focused question, follow the team's expectations, and ask what signal should trigger help or escalation.	Supervisor feedback, appropriate help-seeking, clearer updates, and adherence to local standards.
Mentorship or teamwork	Send a concise update using Situation, Meaning, Action, Need; close the loop on commitments.	Response clarity, fewer surprises, and visible follow-through.

The test

- Can I explain the idea without the source open?
- Can I recognize when it applies - and when it does not?
- Can I use it under realistic constraints, with appropriate supervision?
- Did the behavior improve the work, the learning, or the handoff?

DO NOT CONFUSE ACTIVITY WITH LEARNING

More notes, longer study hours, more meetings, or more repetitions can coexist with the same error. Look for a changed model, changed behavior, or changed result.

6. Run a 20-minute weekly review

The weekly review keeps isolated experiences from disappearing and keeps your system from becoming a storage closet. Choose one or two meaningful episodes, not an exhaustive diary.

Minutes	Review move	Prompt
0-4	Select	Which episode, error, conversation, or observation is most likely to improve future behavior?
4-8	Reconstruct	What did I expect? What happened? What information, incentive, mechanism, or delay mattered?
8-12	Interpret	What did I learn? What remains uncertain? What would a credible opposing interpretation be?
12-16	Commit	What will I repeat, stop, change, ask, or escalate next time?
16-20	Schedule	Where will I test the change, who can observe it, and when will I review the evidence?

Weekly reflection

A pattern I noticed...

An assumption or part of my model that changed...

One contribution I made, including whose work enabled it...

One changed behavior I will test next week...

CREDIT IS PART OF PROFESSIONAL LEARNING

Name the people whose teaching, coordination, feedback, technical work, administrative work, or patient-facing labor made your learning possible. Contribution without accurate attribution is incomplete.

One-page learning episode record

Date / setting: _____ Learning objective: _____

Role and boundary: _____

Before: current model	During: what I noticed
What do I expect? Which assumptions need testing?	What decision, mechanism, uncertainty, feedback loop, or stakeholder effect mattered?
After: revised model	Next: changed behavior
What is now clearer? What remains provisional or contradictory?	What will I do differently? Where will I test it?

Feedback sought	Evidence and review trigger
Who can observe the behavior? What specific question will I ask?	What would show progress? When should I reopen the conclusion?

BEFORE SAVING

Confirm that this record contains no protected health information, identifying details, copied clinical text, confidential institutional information, or material you are not permitted to retain.

A compact update for supervisors and collaborators

Situation	Meaning	Action	Need
What changed or matters now?	Why does it matter for the work, timeline, risk, or learning?	What have I done or what will I do next?	What decision, input, review, or help is needed - and by when?

Further reading and scope

Use these resources to deepen the concepts in the guide. Apply the learning loop within your role and your institution's expectations; it is a practical peer resource, not a clinical curriculum or a substitute for formal training.

Put the loop to work

- Choose one recent learning episode rather than trying to redesign everything at once.
- Name the changed behavior in language another person could observe.
- Set a review point and decide what evidence would strengthen, weaken, or revise the change.
- Share only the information appropriate to the setting and your role.

Further reading

- Donella H. Meadows, Thinking in Systems.
- Douglas Stone and Sheila Heen, Thanks for the Feedback.
- Tiago Forte, Building a Second Brain.
- Shane Parrish and Rhiannon Beaubien, The Great Mental Models.
- Gorick Ng, The Unspoken Rules.
- Zosia Krusberg, 'The Courage to Be Wrong.'

Use and review

- Adapt the prompts to your school's or institution's expectations.
- Ask educators, supervisors, and experienced trainees to challenge the system where context matters.
- Treat every rule as revisable when evidence, role, supervision, or setting changes.

THE STANDARD

A learning system is useful when it helps you notice more accurately, ask better questions, act within your role, seek help earlier, contribute more reliably, and revise your understanding when the evidence changes.

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