

A Guide to Incorporating UpToDate into Curriculum

Background

The Better Evidence for Training program based at Ariadne Labs—a joint center for health systems innovation at Brigham and Women's Hospital and Harvard T.H. Chan School of Public Health—aims to enhance access to and uptake of the latest clinical evidence among future health care providers, encourage the habit of consulting evidence-based clinical resources, and ultimately, to support better patient care everywhere, for everyone, every time.

UpToDate is an evidence-based digital tool used by 1.9 million clinicians in over 190 countries, including 90% of major academic medical centers in the United States. The tool aids in clinical decision making and has been shown to improve patient outcomes. Better Evidence [research](#) found that introducing UpToDate to medical students in Rwanda helped them habituate to consulting the evidence as part of clinical decision making after graduation. Benefits of introducing the tool to medical students and residents early in their career include:

- Demonstrating the importance of evidence-based care
- Habituating students to consult digital tools in practice
- Ensuring they have access to the latest clinical information to prepare for exams and provide care for patients

UpToDate can also be used by clinical faculty and staff to improve their teaching.

This document outlines some of the many ways UpToDate can be integrated into curriculum as part of the process of rolling out Better Evidence at your institution.

Approaches to UpToDate curriculum integration

To introduce and incorporate UpToDate in *Pre-Clinical* coursework, instructors can:

1. Teach students what Evidence-Based Medicine is by typing “EBM” in UpToDate.
2. Teach students how to formulate clinical questions by typing “PICO” in UpToDate and then practicing using this method.
3. Use or teach from UpToDate clinical [case studies](#) as part of related coursework.
4. Teach pharmacology through the [Lexicomp/UpToDate Drug Database](#).
5. Use UpToDate to teach [graded recommendations](#).
6. Search UpToDate for [graphics, photos, and algorithms](#) to use in lectures or assignments.
7. Ask students to use and [cite](#) UpToDate as a source for class papers or presentations. Also have them review the [UpToDate Linking policy](#).
8. Have students use UpToDate to find primary source material via references listed in the tool.

To incorporate UpToDate into *Clinical* coursework, instructors can ask trainees to:

1. Create a differential diagnosis using evidence from UpToDate.
2. Apply the [UpToDate Pathways](#) tool to a clinical scenario they have participated in.
3. Reference the UpToDate [Lab Interpretation tool](#) in patient care.
4. Write original clinical [case studies](#) based on clinical scenarios using UpToDate.
5. Search for Guidelines by searching for keyword(s) followed by “guidelines.” See also [Overview of clinical practice guidelines](#).
6. Look for a gene test interpretation or type “gene test interpretation.”
7. Check the sections: [What's new](#) and [Practice Changing Updates](#) (under Contents in the blue bar).

Additional UpToDate Educator Resources can be found here:

<https://www.uptodate.com/home/educator-resources>

UpToDate also provides some additional cases and tests that are linked here:

1. [ECG tutorials](#)
2. [ECG test \(basic and advanced\)](#)
3. [Interactive Diabetes Cases \(20\)](#)
4. [Clinical microbiology review \(6\)](#)
5. [Diagnostic dilemmas in hypoglycemia: Illustrative cases](#)
6. [Hepatitis B virus: Case studies](#)
7. [Clinical pathological cases in gastroenterology: Stomach](#)
8. [Clinical pathological cases in gastroenterology: Small intestine and colon](#)
9. [Cases illustrating problems with insulin therapy for diabetes mellitus](#)
10. [Glossary of common biostatistical and epidemiological terms](#)

If you find other approaches to add to this list or have any questions, feel free to share them with the Better Evidence team at betraining@ariadnelabs.org - we would love to hear from you!