

What is Measurement Decision Theory?

ABPerio Minute®* is an innovative way to assess and enhance specialty-specific knowledge. Given this innovation, we are using a new method to analyze Diplomates' ABPerio Minute performance. It's called Measurement Decision Theory (MDT). We use MDT to estimate the probability that Diplomates are keeping their knowledge up to date based on their pattern of responses to ABPerio Minute questions.

Here's How it Works:



When Initially Certified

ALL ARE:



When initially certified, every Diplomate's knowledge is up to date.

Throughout Their Career

MOST ARE:



Based on the industry standard for board-certified Diplomates, we assume most Diplomates remain up to date throughout their career.

Over Time
ONLY A FEW ARE:

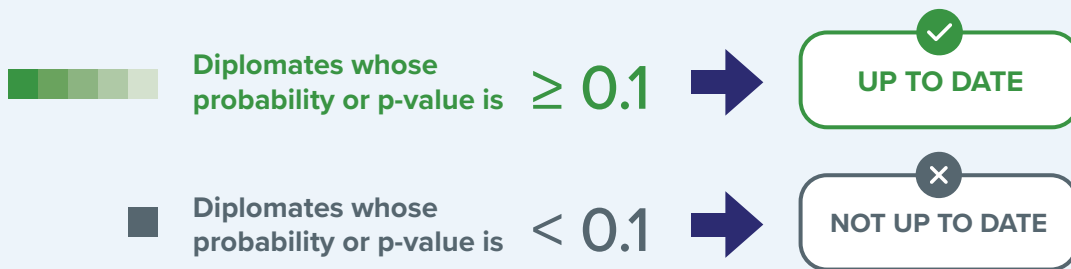
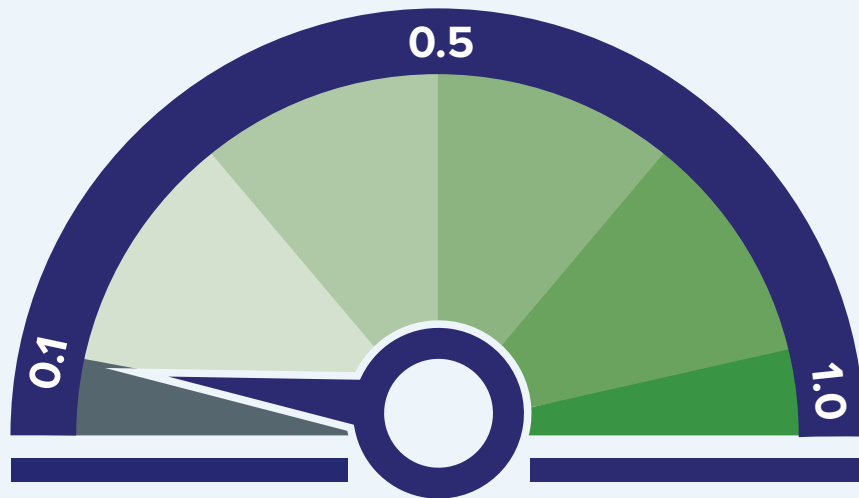


However, over time, a few Diplomates may begin to lose knowledge, which will be evident in the pattern of responses to ABPerio Minute questions.



Each time Diplomates answer a question, a bit more information is obtained about the probability they are maintaining their knowledge. The more questions Diplomates answer, the more certainty there is about whether they are keeping their knowledge current.

Probability of Knowledge Proficiency



We consider a Diplomat whose p-value is > 0.1 likely to be up to date. A p-value of < 0.1 may indicate a Diplomat is not up to date. The p-value was selected based on recommended industry standards.

Using MDT to set a standard for ABPerio Minute is different than grading a traditional exam.

Here are a few important points about what makes it distinct:

1

MDT provides a PROBABILITY, NOT a score. ABPerio Minute lets Diplomates know their percent correct score and how it compares with their peers but the percent correct is NOT used to directly calculate the probability that a Diplomate is up to date.

2

MDT does NOT grade on the curve. With MDT, EVERYONE can remain up to date. It is known through learning science research that participating in continual assessment helps individuals learn. So, participating in ABPerio Minute can help Diplomates stay up to date.

3

MDT can be used to reward learning. If Diplomates answer a question incorrectly, they may see that question or a similar one again and get credit for answering it correctly the second time around.

4

MDT takes into account a question's difficulty. If many Diplomates are getting a question wrong, MDT adjusts the importance of the question in determining their p-value.

5

Use of MDT in the continuous certification process is designed to enhance a Diplomate's specialty-specific knowledge and ensure they remain up to date throughout their career.

Remember, ABPerio Minute is designed to help our Diplomates assess and enhance their knowledge; it is not intended to be punitive.



The American Board
of Periodontology

Certifying in Periodontology and Dental Implant Surgery

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