

Best Practices in Multiple Choice Question Writing

BEST PRACTICES



- Focus on Clinical Reasoning: Application questions that emphasize higher-order thinking and decision-making.
- Avoid Irrelevant Details: Only include information necessary to answer the question.
- No "Cueing" or Clues: Do not use grammatical or formatting cues that reveal the correct answer.
- Include gender identity and pronouns

Question Components

- **Lead-in:** Sets the scenario or context. Should be necessary for answering the stem.
- **Stem:** A direct, specific question related to the lead-in.
- **Alignment:** The question should assess application, analysis, or synthesis of information—not recall

Quick NBME Question Checklist

- ☐ Is there a relevant clinical vignette (lead-in)?
- ☐ Is the stem direct and clear?
- ☐ Can the stem be answered without the lead in?
- ☐ Does the stem have only one correct answer?
- ☐ Are distractors plausible and parallel?
- ☐ Does the question assess applied knowledge or reasoning?
- ☐ Is the question free of grammatical or formatting cues?



WHAT IS A GRAMMATICAL OR FORMATTING CLUE?

- Any clue in the way the question or answer choices are written that helps the test-taker identify the correct answer without knowing the content.
- Students can guess based on language or presentation instead of their knowledge

Answer Choices

- 5 answer options (single best answer)
- Only one correct answer
- Distractors are plausible but clearly incorrect
- Avoid "all of the above" or "none of the above".
- Parallel grammatical structure in all options.
- Keep answer options similar in length and format.
- Alphabetize answer choices

Post Exam Analytics

Statistic	Description	Benchmark/Interpretation
Difficulty Index (p-value)	Proportion of examinees answering correctly	Easy >0.90: Mid: 0.80-0.90 Hard 0.80
Discrimination Index	Distinguish high- vs low-performers	>0.30
Point-Biserial	Correlation of item performance & exam score	> 0.20 is ideal
Distractor Analysis	How often each incorrect option is chosen	Each distractor chosen by 5-25%



COMMON PITFALLS TO AVOID

- Excessive or irrelevant details in the vignette.
- Answer choices that are too easy to dismiss.
- Multiple correct answers or ambiguous distractors.
- Testing memorization rather than clinical application.