

Dr. Abhijat Sheth
President – NBEMS

Subject: Proposal for the Implementation of Annual Formative Assessment for Postgraduate Medical Students in India

Dear Dr. Sheth,

It is an honor to write to you regarding my submission to the introduction of all 100% Multiple choice **formative assessment system** for postgraduate students, initially focusing on the specialty of **General Medicine**, with plans to expand this initiative to all medical specialties. **Leads to theory exit examination** all MCQ model similar to other global examinations. The goal of this system is to enhance **knowledge transfer** and bring global standards through **structured national examinations**. This model has been successfully implemented since the 1960s in developed countries.

Objective:

The goal of this initiative is to improve the education and training of postgraduate medical students by implementing a **100% multiple-choice question (MCQ) format for annual formative assessments**. These assessments will be conducted for **DNB General Medicine postgraduates** across all years of study (PGY-1, PGY-2, PGY-3) to ensure consistency and alignment with global standards in postgraduate medical education.

Current Gaps in Postgraduate Assessment in India:

In India, the current system of postgraduate medical assessments presents several significant gaps that hinder the effectiveness of training and evaluation. These include:

- 1. Current Assessment Methods:** Gaps
The current evaluation primarily relies on **essay-type questions, short-answer questions**, and a few **MCQs**. While these methods test recall, they fail to adequately assess higher-order thinking and the practical application of knowledge. Additionally, the **number of MCQs** is insufficient to cover the extensive curriculum effectively.
- 2. Bias in Faculty Evaluation:**
Assessments are often subject to **faculty bias**, particularly with essay-type and short-answer formats where subjective interpretation may vary. The lack of **standardized, objective grading metrics** leads to inconsistencies and potential bias in evaluation.
- 3. Lack of National Standardization:**
There is no **national standardization** for assessment criteria or performance benchmarks, making it difficult to evaluate students on a consistent and uniform scale across institutions. Without clear, **national metrics**, comparing student performance or the quality of training programs becomes challenging.
- 4. Limited Self-Assessment Opportunities:**
The current system provides few opportunities for **self-assessment**, preventing students from identifying their strengths and weaknesses. Without tools for self-reflection,

students miss the chance to track their progress over time and make improvements accordingly.

5. Need of Feedback Mechanisms:

There is a lack of **continuous, structured feedback** on students' performance. Students are often not informed about their progress or areas needing improvement, which hampers their ability to correct knowledge gaps in real time.

6. Need of Global Benchmarking:

Unlike countries like the **USA, UK, and Australia**, India does not have a system that allows postgraduate students' performance to be compared against **global benchmarks**. Students in these countries benefit from assessments aligned with **international standards**, ensuring quality and comparability.

Key Features of the Proposed Formative Assessment System:

- **200 MCQs annually**, covering all domains of the **General Medicine** curriculum.
- **No pass/no fail** — this is an **assessment-only** exam designed to identify knowledge gaps and track progress.
- Annual administration, using the same set of questions for **PGY-1, PGY-2, and PGY-3** students, ensuring consistency.
- **A computerized, non-biased** format to ensure **fairness** and **standardization** across all participants.
- The assessment will facilitate **self-assessment**, enabling students to identify strengths and areas for improvement.
- **Feedback** will be provided, allowing students to plan future evaluations and compare their performance with national and international peers.
- This formative assessment will serve as a **benchmark** to evaluate residency programs nationwide, helping to align with **global academic standards**.
- The **final theory examination** will remain **pass/fail**, but the formative exam will provide valuable insights into the students' cognitive and theoretical progress.

Benefits of the 100 % MCQ Formative Assessment System:

1. National Standardization:

The formative assessment ensures a **uniform standard** of education across the country, similar to the USA, UK, Australia, and New Zealand, where postgraduate training has incorporated **100% MCQs** since the 1960s.

2. Improved Cognitive Knowledge Assessment:

The transition to **100% MCQs** will enhance the quality of **concept-based** questioning, thereby improving cognitive understanding and knowledge retention.

3. Self-Assessment Tool:

Residents will have the opportunity for self-assessment, helping them identify areas of improvement and monitor their progress throughout their training.

4. Global Benchmarking:

This system will align India's postgraduate training with **international best practices**, providing a basis for comparison with peer programs worldwide.

5. Feedback for Continuous Improvement:

Program directors will receive detailed feedback to tailor educational strategies, provide counseling, and plan remediation efforts where needed.

6. Better Preparation for Final Examinations:

This formative assessment will help students prepare for their **final theory exams** by identifying gaps in their knowledge and addressing them early, leading to better learning outcomes.

Comparison with International Practices:

Postgraduate medical education in the **USA, UK, and other countries** has long transitioned to using **high-standard, cognitive multiple-choice questions (MCQs)** for both formative and summative assessments. These countries have seen significant improvements in educational outcomes, with pass rates consistently above 90%. The use of MCQs has been an essential part of their postgraduate training systems since the 1960s. It is time that India adopts a similar model to ensure the advancement of medical education and improve training outcomes.

Conclusion:

We Request the introduction of an **annual, computerized, formative assessment** for all postgraduate students in **General Medicine**, conducted nationwide. This initiative will help identify knowledge gaps, improve training outcomes, and align India's medical education with **international standards**.

We believe that implementing this system will significantly enhance knowledge transfer, improve the quality of postgraduate training, and provide valuable data for both residents and program directors. By addressing the current gaps in postgraduate medical education, we can ensure that our students are better equipped to provide excellent patient care and contribute to the global medical community.

We look forward to your consideration and support in implementing this important initiative for the advancement of postgraduate medical education in India.

Sincerely,

Lokesh Edara, MD

NOV 7th 2024