



Academic audit: Suggested methods to assess medical teachers performance

Surya Prakasa Rao*

Professor & Dean, Narayana Medical College, Chintareddypalem, Nellore, India

ABSTRACT

One of the tools available to measure the adequacy of academic input is the “Academic Audit.” The academic audit provides an opportunity for a regular strategic overview of a college’s teaching-learning process. It also delineates the strengths, weaknesses, opportunities, and constraints for the assessment of medical teacher performance tools. Finally, it improves to choose the cost-effective methods of learning. Academic audits are a rare entity among medical colleges. These centers of higher education, though in the ambit of universities, have not rigorously been asked to demonstrate the quality of education imparted. In the few colleges where attempts are being made, the audit was unable to fulfill its objectives. Even now, medical colleges’ quality or excellence is measured by subjective measures. After taking stock of the academic audit situation in Andhra Pradesh, it is suggested that these audits can be extended to assess the performance of the teachers. The expected roles of a medical teacher, namely, medical care, teaching, research, human values, innovation and contribution towards society can be categorically assessed.

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Introduction

The institutions imparting higher education in medicine are swamped by “must do” initiatives designed to improve learning, raise standards, and meet a whole host of other complex educational aspirations. The objective of any teacher assessment as part of an academic audit is to clarify the medical teachers’ roles and responsibilities. Moreover, the fundamental purpose of teacher assessment is to improve the quality of teaching in a medical school. Medical colleges, with their multicultural, multi-ethnic students, and faculty must be able to create a suitable learning environment and support active learning [1,2]. Sometimes actions taken for educational quality assurance (like faculty peer evaluation) can have a negative impact and create a culture of mistrust among faculty [3]. National Assessment and Accreditation Council (NAAC) has identified seven domains for audit [4], and Baldwin [5] proposed five domains of educator performance to assess the faculty at medical colleges. However, there are no standard guidelines available to assess faculty performance [6].

The dean, as “guardian of the faith,” should always keep asking him/herself, faculty, and students, “Are we achieving what we claim? And if not, why? And what can we do about it?” As an institutional custodian, she/he should ensure that a talented and committed pool of educators is available to model humanistic values and to teach the latest biomedical knowledge and skills [7,8]. As this faculty assessment is rarely attempted, few would inquire about the role of medical teachers’ assessment.

Medical teachers are answerable to the learners (students, residents, and colleagues), patients, and the institution management. In the present scenario, in India, medical teachers are not answerable to Regulatory bodies (Medical Council of India), Organizations (Hospitals, medical colleges), society, or teachers themselves for evaluation of their teaching.

The faculty working at medical colleges view that teachers’ assessment does not have a well-developed set of standards and criteria and that the current methods are ambiguous, non-uniform, and inadequate. The faculty always feel that teaching is being given less recognition at medical colleges [9].

Contact Surya Prakasa Rao ✉ sprao2000@gmail.com 📧 Professor & Dean, Narayana Medical College, Chintareddypalem, Nellore, India.

Proposed Framework and Discussion

Medical teachers' assessments are mainly in response to bottlenecks pointed out in promotions offered to medical teachers. Such assessments can be effectively utilized as a tool in faculty development programs. Effective feedback from all such assessments would help improve faculty performance. Still, there is no uniformity in the assessment of a clinician-teacher. The NAAC's suggested domain for the assessment in academic audit is superficial and never touches the clinician-teachers' performance assessment. Defining Academic Audit B. L. Gupta [10] states that, "it is a systematic and scientific process of designing, implementing, monitoring, and reviewing the quality of academic systems, i.e., inputs, processes, and outputs. It emphasizes on reviewing the performance of the academic inputs concerning quality assurance. The academic audit reports showcased by a few medical colleges in India are examples of this phenomenon [11–14].

There are three main approaches for the medical teacher assessment, which are depicted in Figure 1.

1. The perceptions of the students in the form of feedback are the commonest method of assessing the medical teacher. Such students' feedback undoubtedly has inherited bias and is skewed. Similar is the fate of peer perceptions. In India, commercial magazines and survey organizations use these perceptions with the help of self-assessed performance scores combined with perpetual survey scores collected through the Delphi technique. These scores are being utilized to rank the institutions in India.

The past couple of decades witnessed this kind of ranking system for medical colleges.

2. The product assessment in the form of educational innovations and developing student-friendly learning material is being employed to assess the faculty. Sometimes student achievements at University/National competitions are indirectly attributed to the faculty. However, these are liable for subjective variations, and there are no consistent objective criteria.

3. The Academic audit has been proposed by the National Bodies of Higher Education [University Grant Commission (UGC) and NAAC] as one such tool wherein clinician-teacher assessment can be incorporated. Though academic audits are carried out once every 5 years, the teacher assessments can be performed annually.

Academic audits are mainly carried out to improve the quality of teaching and learning, whereas clinician-teacher assessments are mainly intended for academic promotion. The age-old tradition of annual confidential reports (ACR) may not be sufficiently objective in truly assessing the teachers' performance. In India, different ACR formats are being implemented in Public Medical Colleges. These are mainly aimed at the performance assessment of public servants working in all sectors but are not specific to medical teachers. The advantages of the academic audit are detailed in Table 1. It is postulated that the academic audits are most beneficial for improving the quality of teaching and learning for the benefit of students and also for

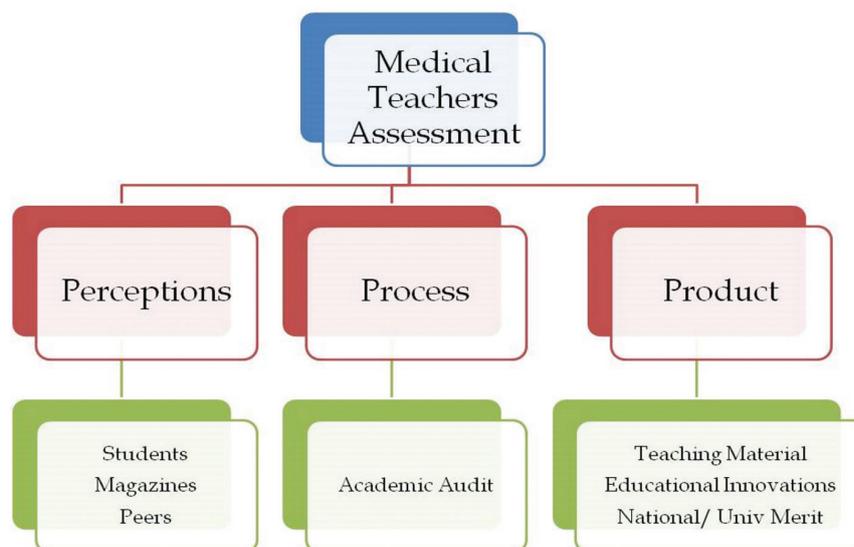


Figure 1. The approaches to teacher assessment.

the feedback of teachers. Thus, these audits will be most beneficial not only for all the stakeholders, including the teachers themselves. Improving learning through academic audits would be able to enhance student learning and reduce the failure rate in examinations. The community and country will benefit from choosing the most cost-effective methods of teaching and learning.

However, it was pointed out that the academic audit as envisaged by the NAAC is beneficial in quality assurance and enhancing the quality of academic activities in higher educational institutions, teachers, and students. The other stakeholders comprising of community and country are least benefitted. There are sparse reports utilizing the academic

audit objectively to improve the quality of teaching among engineering institutions [15].

Learning outcomes

Studying the teacher learning process would ultimately benefit the student learning process as these two are interlinked (Fig. 2). Understanding and assessing teacher academic performance would yield better student outcomes. Though the academic performance of the students is a surrogate measure of teacher performance, there is not always a perfect correlation between these two areas. The quality of education imparted at medical colleges cannot be precisely be measured by the existing methods (Table 2). Realizing the daunting

Table 1. Advantages of the academic audit.

Stakeholder(s)	Advantages				
	Improve Quality	Identify roles & responsibilities	Cost-effectiveness	All round development	Image building
Institution	+++	+++	+	+++	++
Teachers	+++	+++	++	+++	+
Students	+++	+	+++	+	+++
Community	+	+	+++	+++	+++
Country	+	+	+++	+++	+++

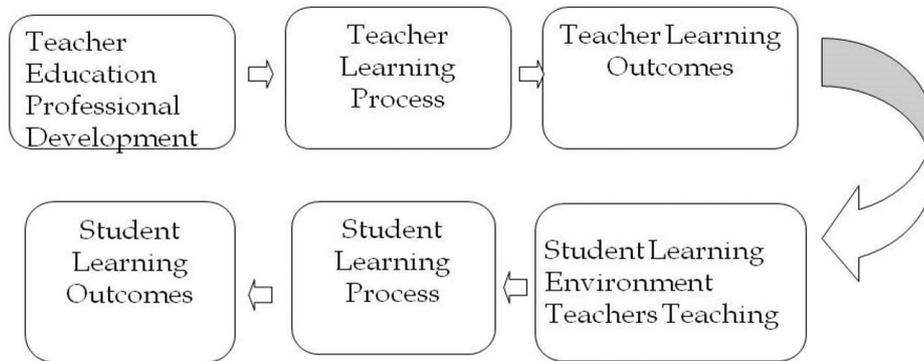


Figure 2. Chain of evidence from teacher education and professional development to student.

Table 2. Routine methods for assessing the quality of Education in medicine.

Source	Scientific temper/ scrutiny	Bias	Face validity	Criteria validity	Sensitivity	Utility	Overall grading
News agencies reports	+	+++	+	+	+	++	+
NAAC reports	+++	+	+++	+++	++	+	++
Community perceptions	+	+++	+	+	+	++	+
Peer understandings	++	++	++	+	++	++	++
Academic performance/results of students	+++	+	+++	++	++	+++	+++

task of upholding the quality of medical education in India, the Medical Council of India initiated the following measures in the last two decades [16,17].

Medical Council of India Initiatives

1. Medical Education Unit
2. Curriculum Committee
3. Mandatory Continuing Medical Education (CME) sessions with/without credit hours
4. Training in Basic & Advanced Teaching Technologies

It is expected that through these measures, the quality of medical education will be uplifted. These measures, after initiation, were never subjected to evaluation for their impact on quality medical education. The roles of a medical teacher are manifold and include medical care, teaching, research, mentoring, innovation, and contribution to the society [18,19]. Medical teachers, unlike other teachers of higher education, need to devote a majority of their time to medical care. This has resulted in overriding of all other roles. Preoccupation with clinical care and setting aside teaching and research responsibilities have become the norm in medical colleges [20]. The following Table 3 details the allocation importance attributed to the clinician-teacher by the regulatory bodies.

Table 3 confirms the tubular vision by the regulatory bodies towards the roles of the medical teacher. By looking at the framework developed, teacher assessment can be carried out annually by the respective institutions in an objective manner. The model proposed is depicted in Figure 3.

Medical Council of India (MCI) respects and recognizes teaching experience and research contribution in the form of publications for academic

promotions [21]. Thereby changing the role of medical teacher into medical teacher-researcher. UGC categorically specifies teaching, research, and mentoring as essential qualities of a teacher in institutions of higher education. Similarly, Educational Affairs of the Association of American Medical Colleges (GEA-AAMC) emphasizes teaching, mentoring, and innovation as important qualities of a medical teacher [22]. NAAC has identified seven domains for the assessment of the quality of teaching and learning at higher education centers [18,23]. However, these critical areas are broad-based and are less objective. The internal quality assurance cell documents narratives in these concerning areas. Utilizing these seven broad areas, a road map to assess the medical teacher performance can be prepared. The proposed details in each of these areas are depicted in Figure 3. These details can be graded depending on the performance of the teacher, and a scoring system can be developed. The outline of the scoring system is as follows.

Table 3 consisting of seven broad areas of teaching is glaringly devoid of clinical workload and clinical responsibilities. In this table, the weight points also may not commensurate with time invested and their effects on student performance. This model is suggested as a broad framework, the basis of which can be utilized for each specialty with specific activities. This constructed framework is broad-based and needs modifications suitable for specific departments of clinical medicine.

The total marks allocated for each area leading to a maximum assessment score acquired is 20. Any score of >15 is excellent. Scores below 10 indicate poor performance and require urgent attention. The score matrix example suggested requires field validation at medical colleges.

Table 3. Role(s) of a medical teacher expected.

Institution/ regulatory body	Medical care	Teaching	Research	Human values/ mentoring	Innovation/ leadership	Contribution towards society
Medical Council of India (MCI)	No	Yes	Yes	No	No	No
University Grant Commission (UGC)	No	Yes	Yes	Yes	No	No
National Assessment Accreditation Council (NAAC)	No	Yes	Yes	Yes	Yes	Yes
State Government	No	No	No	No	Yes	No
Management of Institute(s)	Yes	No	No	No	No	No
Educational Affairs of the Association of American Medical Colleges (GEA-AAMC)	No	Yes	No	Yes	Yes	No

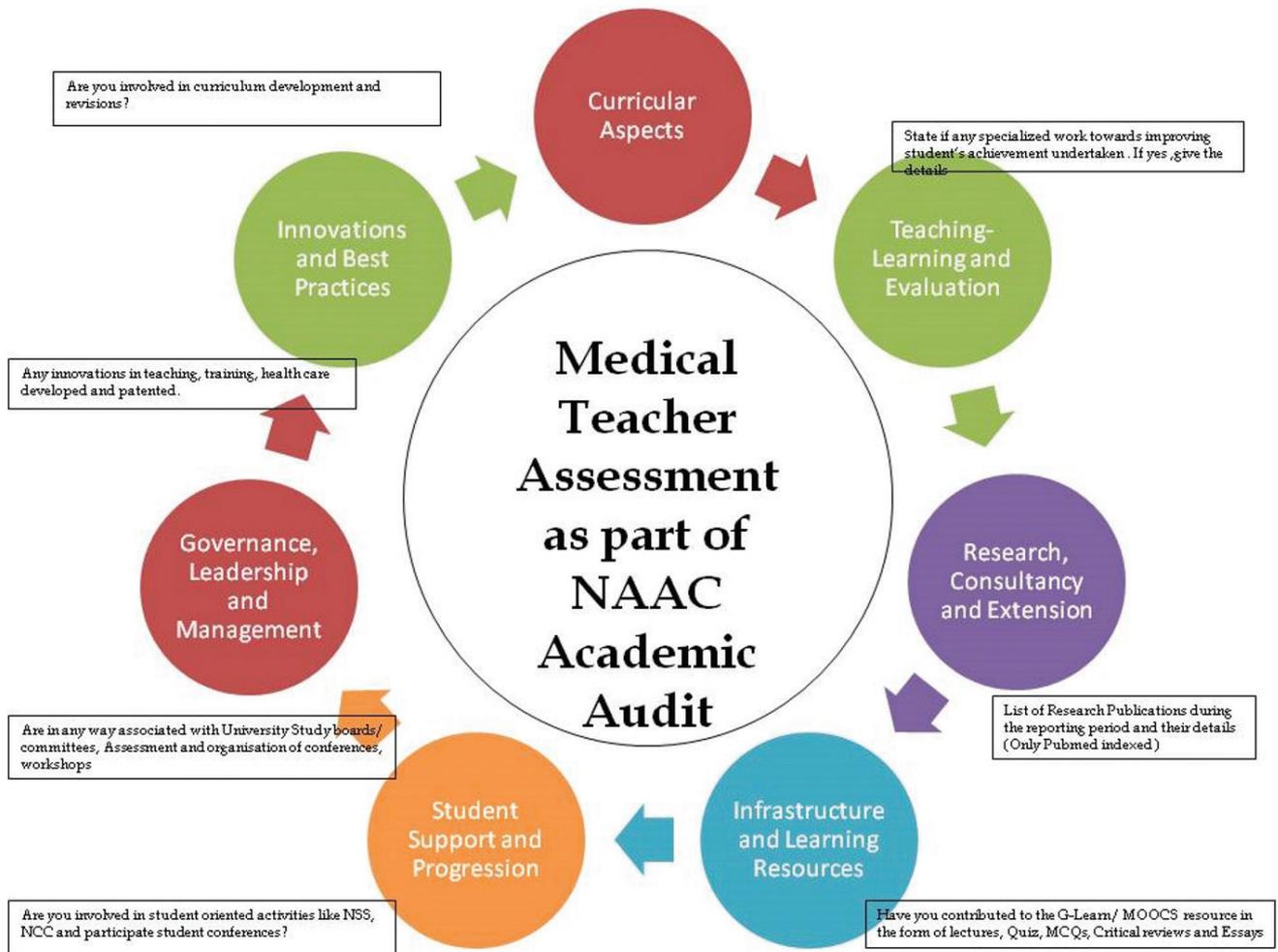


Figure 3. The components of an academic audit and their relationship with the medical teacher assessment.

Table 4. The suggested key aspect points of academic audit as part of medical teacher assessment.

No	Criteria				Max total ^a
		1	2	3	
1	Are you involved in curriculum development and revisions?	BOS member OR Curriculum committee member	Contributed to revision in curricula		2
2	State if any specialized work toward improving student's achievement	Took Revision/ remedial classes	Adopted a mentoring scheme	Facilitated peer education, catching up	3
3	List of Research Publications during the reporting period and their details (Only Pubmed indexed)	One as the second author	Two/>2 as second author OR One or >1 as the first author	Individual external funded projects/ grants	3
4	Have you contributed to the MOOCs resource in the form of lectures, Quiz, MCQs, Critical reviews, and Essays	Contributed <3 lectures	Contributed >3 lectures	Uploaded Quiz, Critical reviews	3

Continued

No	Criteria				Max total ^a
		1	2	3	
5	Are you involved in student-oriented activities like NSS, NCC, and participate in student conferences?	NSS/NCC Program Officer	Organized camps/ student activities	Guided/trained students in STS projects and quizzes	3
6	Are you in any way associated with University Study boards/committees, Assessment and organization of conferences, CME, workshops	Member of one Univ/college committee	Organizing secretary of at least one local/regional conference/ workshop	Organizing secretary of state/national Conference/ workshop	3
7	Any innovations in teaching, training, health care developed and patented.	Follows PBL/Case-based teaching methods	Innovative methods of treatment/health care developed & recognized	One or more Patent(s) registered	3
Total					20

BOS = Board of Studies; MOOCS = Massive Open Source Online Course; MCQ = Multiple Choice Questions; CME = Continuing Medical Education; STS = Short Term Studentship; PBL= Problem-based Learning; NSS = National Service Scheme; NCC = National Cadet Corps.

^aSuggested scale:

Total Score	Performance Remarks	Action Suggested
>15–20	Excellent/Good	Eligible for fast track promotion/incentives
>10–15	Satisfactory	Eligible for promotion on regular basis provided vacancy is available
<10	Not Satisfactory	Require additional support and training. Not eligible for promotion

Conclusions

Medical college faculty have varied job responsibilities beyond teaching and have to contribute clinical work besides teaching. Presently, clinical work supersedes teaching responsibilities. It is suggested that Teaching must be valued in and by the institution. There may need to be a “cultural change” or change in conceptions of teachers, learners, and educational institute managers. It is said that if teaching evaluation is done inaccurately and in isolation, the teacher may remain complacent in his/her ineptness or isolated in his/her excellence. A suggested objective score matrix of medical teacher’ performance based on the NAAC principles needs to be evaluated as a starting place for establishing a truly objective means of assessing teacher performance.

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