Review Article

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Assessment and accreditation of a medical college by national assessment and accreditation council: an overview

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ABSTRACT

Accreditation affirms provision of quality education, thus determines its graduate attributes. WFME, WHO and various bodies have been striving to ensure credibility of educational institutions through accreditation. NAAC is an Indian accrediting body providing framework for quality assurance to higher education institutions. Being an autonomous body under UGC, it sets a standard of excellence to which they are bound to adhere. This article provides details regarding an insight into NAAC, its vision, objectives, core values and the process of accreditation. The details regarding various criteria, components, allotment of weightage to each of them are detailed in the manuscript. The requirements and needs towards preparedness for this accreditation process are simplified to make the readers to understand easily thus providing a bird's eye view of entire process.

Keywords: Assessment and accreditation, Higher education institution, Key indicators, Medical college, Quality assurance

INTRODUCTION

The standards of medical colleges, as adopted and maintained by the educational institutions, goes a long way in shaping the medical practitioner of today and tomorrow. Remarkable impact of social and economic factors on medical education have compelled to take a fresh look in to its quality. The importance of medical education in delivering quality healthcare is assuming greater prominence. Many stakeholders have realized that without addressing the quality in medical education, improving healthcare delivery would not be possible.

Internationally, the World Health Organization (WHO) and World Federation for Medical Education (WFME)

have decided to establish a joint policy on improvement of health system performance by upgrading the quality of health profession education. The overall mission of WFME is to improve the health for all through promotion of high-quality medical education. In this regard, several global initiatives have been undertaken over past few years to ensure quality assurance in higher education, establishing accreditation standards for basic and postgraduate medical education, continuing professional development of medical doctors.¹

Medical schools in India produce the largest number of doctors than anywhere else in the world (60000 from 450 medical schools), corresponding to the rapid proliferation

of medical colleges in the last two decades, especially within the private sector.

The Medical Council of India (MCI) is a regulatory body that addresses the approval of any reforms in medical curricula. It essentially focuses on the infrastructure and human resources, than quality of education or outcomes. In recent years, the governing bodies of medicine in our country have come under the scanner, drawing strong criticism from legal authorities regarding stagnation in the education system. On the other hand, India is emerging as a favorite medical tourism destination, citing the advances and expertise in the field. Hence there is dearth need to revamp medical education system in our country to enhance the quality of medical services and personnel. The possibility would be making every institution to have compulsory accreditation with national quality assurance bodies to ensure quality on par with global standards. In this regard several health education institutions have been voluntarily opting for NAAC accreditation. Hence the article intends to provide concise details regarding NAAC, its vision, objectives, core values and the process of accreditation. Also, various criteria, components, allotment of weightage to each of them are summarized in the manuscript.

REVIEW OF LITERATURE

About National Assessment and Accreditation Council (NAAC)

Aligning in the direction of WFME, National Assessment and Accreditation Council (NAAC) was established by the UGC in September 1994 at Bangalore for evaluating the performance of the Universities and Colleges in India. NAAC's mandate includes the task of performance evaluation, assessment and accreditation of universities and colleges in the country.

The philosophy of NAAC is evaluating on an objective of continuous improvement in quality parameters rather than being punitive or judgmental so that all institutions of higher learning are guided maximize their resources, opportunities and capabilities. Assessment basically consists of evaluation of performance of an institution and /or its units. It is accomplished through a process encompassing self-study and peer review based on defined criteria. Accreditation refers to the certification provided by NAAC which is valid for a duration of five years. Currently, Assessment and Accreditation by NAAC is done on a voluntary basis.² The Vision of NAAC is to make quality, a defining element of higher education institutions in India. This is achieved through periodic assessment and accreditation process involving a combination of self and external quality evaluation, promotion and sustenance initiatives. It also encourages self-evaluation, accountability, autonomy and innovations in Higher Education by undertaking quality-related research studies, consultancy and training programmers. The above all can be done by collaborating with various

stakeholders for the quality evaluation, promotion and sustenance.³

DISCUSSION

The NAAC conducts assessment and accreditation of Higher Educational Institutions (HEI) to obtain an insight into of the 'Quality Status' of the institution. It reviews the institutions for its maintenance to the standards of quality in terms of its performance related to the educational processes and outcomes, curriculum coverage, teaching-learning processes, faculty, research, learning infrastructure. resources. organization. governance, financial well being and student services.4 They are distributed into core values which are determined through Quality Indicator Framework (QIF). The FIVE core values of NAAC are (i) Contributing to National Development, (ii) Fostering Global Competencies among Students, (iii) Inculcating a Value System among Students, (iv) Promoting the Use of Technology and (v) Quest for Excellence.⁵ Quality Indicator Framework: Criteria based assessment forms the backbone of NAAC. They are categorized under QIF. It consists of seven criteria, thirty three key indicators, a total of 109 metrics consisting of 41 qualitative and 68 quantitative metrics. The details of indicators with the marks weightage are concisely presented. (Table 1) The numbers in bracket indicate the weightage of marks allotted.

Eligibility for assessment and accreditation by NAAC

The Eligibility Criteria for Assessment and Accreditation (A&A) are; The Higher Education Institutions (HEIs), must have a record of at least two batches of students graduated or been in existence for six years, whichever is earlier and the HEI needs to mandatorily upload the information on All India Survey on Higher Education (AISHE) portal which is an annual web-based all India survey conducted by Ministry of Human Resource Development, which collects data on several parameters such as teachers, student enrolment, programmes, examination results, education finance, infrastructure. The NAAC has prepared un UNIFIED Manual for Health Sciences Colleges consisting of TWO parts namely Part A and B. (Table 2).

The Part - A is Generic in nature applicable to all types of Health Sciences Colleges. The ratio of Quantitative Metrics (QnM) and Qualitative. Metrics (QlM) is 65%:35%. The 68 quantitative metric have data to be entered and 41 qualitative metrics have to be explained in detail with certain word limits for each metrics. The details of marks weightage to eack KIs for both qualitative and quantitative metrics are described in Table 3 and 4.

In the year 2018, Revised Assessment and Accreditation (A&A) Framework has been introduced. Modifications are:

- Shift from qualitative peer judgment to data based quantitative indicator evaluation. This was to ensure increased objectivity and transparency.
- It has introduced Pre-qualifier mandate for peer team visit, through 30% of system generated scores. 30% score has to be obtained by the institution to become eligible for the assessment.

Table 1: Criteria and weightages across key indicators (KIs).

Criterion I	Criterion II	Criterion III	Criterion IV	Criterion V	Criterion VI	Criterion VII
Curricular Aspects	Teaching Learning and Evaluation	Research, Innovations and Extension	Infrastructur e and Learning Resources	Student Support and Progression	Governance, Leadership and Management	Institutional Values and Best practices
1.1*(U) - Curriculum Design and Development (NA) 1.1*(A) - Curriculum Planning and Implementation (15)	2.1 Student Enrolment and Profile(20)	3.1 *Promotion of Research and Facilities (Not Applicable to Affiliated Colleges)	4.1 Physical Facilities (25)	5.1 Student Support(45)	6.1Institutional Vision and Leadership (10)	7.1 Institutional values and social responsibilities (50)
1.2 Academic Flexibility(20)	2.2 Catering to Student Diversity (25)	3.2 Resource Mobilization for Research (17)	4.2 Clinical, Equipment and lab learning resources (20)	5.2 Student Progression (40)	6.2Strategy Development and Deployment (10)	7.2 Best Practices (30)
1.3 Curriculum Enrichment (25)	2.3 Teaching- Learning Process(45)	3.3 Innovation Ecosystem (10)	4.3 Library as a Learning Resource (20)	5.3 Student Participation and Activities (25)	6.3Faculty Empowerment Strategies (30)	7.3 Institutional Distinctiveness (20)
1.4 Feedback System(20) *(U) - applicable only for Universities *(A) - applicable only for the Affiliated/ Constituent Colleges	2.4 Teacher Profile and Quality(50)	3.4 Research Publications and Awards(23)	4.4 IT Infrastructur e (15)	5.4 Alumni Engagement (10)	6.4Financial Management and Resource Mobilization (20)	
	2.5 Evaluation Process and Reforms(45) 2.6 Student Performance and Learning outcomes(45)	3.5 *Consultancy (Not Applicable to Affiliated Colleges) 3.6 Extension Activities(50)	4.5 Maintenance (Campus infrastructure (20)	of	6.5 Internal Quality Assurance System (IQAS)(30)	
	2.7 Student Satisfaction Survey(50)	3.7 Collaboration (20)				

Table 2: Components of manual.

	Part - A	Part - B
CGPA Marks (Total 1000)	900	100
Metrics	Generic in nature Applicable to all types of Health Sciences Colleges	Discipline-specific (Medical, Dental, Pharmacy, Nursing, Ayurveda, Yoga / Naturopathy, Unani, Siddha, Homeopathy, Physiotherapy and Allied Health Sciences)
Key Indicators	Covering criterion 1 to 7	Integrated into ICT as 8th component

The System Generated Scores (SGS) are the combination of online evaluation (about 70%) and peer judgement (about 30%).

 An element of third party validation of data and revising several metrics to bring in enhanced participation of students and alumni in the overall assessment process.

Table 3: Weightage wise QIM and QnM for manual of health sciences for colleges.

Criterion	Number of Qns (QlM and QnM)	Qualitative metrics, Qns (QlM) (Weightage)	Quantitative Metrics Qns (QnM) (Weightage)	Total Qualitative Metrics (QlM) (Weightage)	Total Quantitative Metrics (QnM) (Weightage)	Total QlM and QnM weightage
Curricular Aspects	10	2(10+5)	8(5+10+10+5+5+10+10+10)	15	65	80
Teaching- Learning and Evaluation	1 25	10 (10+10+10+5+10+15+10 +10+10+10)	15 (5+10+5+10+5+10+10+10+ 10+10+10+10+10+15+50)	100	180	280
Research, Innovation and Extension	16	3 (5+10+15)	13(6+6+5+5+5+5+8+5+10+ 15+10+10)	30	90	120
Infra- structure and Learning Resources	18	9 (10+5+5+7+4+3+2+5+10)	9(5+7+6+3+5+3+5+5+10)	51	49	100
Student Support and Progression	13	3 (2+5+5)	10(10+15+5+13+10+15+15 +10+10+5)	12	108	120
Governance, Leadership and Management	15	8(5+5+5+5+6+7+8+10)	7(5+7+6+6+5+10+10)	51	49	100
Institution Values and Best Practices	12	6(5+3+10+4+30+20)	6(5+3+2+2+10+6)	72	28	100
Total	109	41	68	331	569	900

'The Part B which is Discipline-specific for the Medical College consists of; National Eligibility Entrance Test(NEET) percentile scores of students enrolled for the MBBS programmed during the preceding academic year. Documents pertaining to quality of care and patient safety practices.

The attainment of specific clinical competencies. Policies on organ transplantation. Immunization Clinics as per the quality specifications stated in WHO guidelines. Medical graduate attributes. Faculty Development Programmed organized by the Medical Education Unit(MEU) and emerging trends in Medical Educational Technology.

NABH, NABL, ISO Accreditations. Policies documents regarding preventive immunization of students, teachers and hospital staff likely to be exposed to communicable diseases during their clinical work. Policy documents regarding relevant laws, insurance policies medical indemnity insurance cover for the clinical faculty.

The distribution of metrics varies for universities compared to affiliated or constituent colleges. In 2018, NAAC has come out with separate framework for health science institutions individually. The difference of such institution compared to affiliated/ constituent college category is provided (Table 5).

Benefits of accreditation

The NAAC Accreditation is mandatory for all the higher education institutes, especially state universities.

Without accreditation, universities are not eligible for UGC grants, RUSA grants, financial aid etc. On the other hand, NAAC accreditation determines the quality of the institute in terms of education, infrastructure, research, teaching & learning etc. Institutes with top NAAC grades such as 'A++', 'A+' and 'A' are most sought-after institutes by the students, as they offer highest-quality education.

Table 4: QIF for Manual of Health Sciences for colleges part A.

Metrics	Criterion I	Criterion II	Criterion III	Criterion IV	Criterion V	Criterion VI	Criterion VII	Total
QlM	2	10	3	9	3	8	6	41
QnM	8	15	13	9	10	7	6	68
Total	10	25	16	18	13	15	12	109

Note: In Part B, Number of QlM and QnM varies in all 11 disciplines and is not criterion wise.

Table 5: Health sciences manual for colleges (Part A, Part B) compared to general affiliated / constituent colleges distribution of KIs and metrics.

NAAC benchmarks	Health sciences colleges (part - A)	Affiliated / constituent colleges	
Criteria	7	7	
Key Indicators	33	32	
Total Metrics (QlM and QnM)	109	121	
QlM (37.61%)	41	41	
QnM (62.39%)	68	80	
	Part-A-900		
Total Weightage	Part- B-100	1000	
	1000		

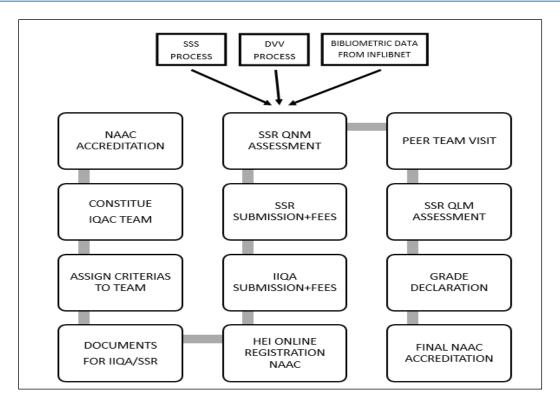


Figure 1: The process of assessment and accreditation.

The major benefits of NAAC accreditation are by helping the higher education institutes to know its strengths, opportunities, weaknesses and challenges through an informed review process. It identifies the internal areas of planning and allocation of resources. The NAAC accreditation will help funding agencies with objective

data so that they can take a decision on the funding of higher learning institutes. The grade/ assessment will help educational institutes to initiate modern or innovative methods of pedagogy.

Also, from the students viewpoint NAAC Accreditation assists to figure out the details of an institute in terms of

quality of education, research output, teaching-learning, infrastructure etc.

It provides an opportunity to choose an institute based on its NAAC grade/ performance in accreditation process. Grades also determines the value of the degree offered by the higher learning institutes.⁷

Table 6: Institutional grades and accreditation status.

Range of Institutional Cumulative Grade Point Average (CGPA)	Letter grade	Status
3.51-4.00	A++	Accredited
3.26-3.50	A+	Accredited
3.01-3.25	A	Accredited
2.76-3.00	B++	Accredited
2.51-2.75	B+	Accredited
2.01-2.50	В	Accredited
1.51-2.00	C	Accredited
<1.50	D	Not
	ע	Accredited

The process for assessment and accreditation broadly consists of

- Decide a target date for the NAAC accreditation
- Form IQAC committee.
- Team formation: Assign seven criteria: Seven senior faculty members assisted by subcommittee consisting of two faculty members under them.
- Microplanning & coordination: The team will work together and collectively having a meeting once in week to discuss about the progress made regarding the documentation and collection of data of the preceding five academic years i.e. July to June.
- The seven criteria contains 33 key indicators and 109 metrics(both quantitative and qualitative metrics). Hence if any institution is planning for the assessment in coming six months have to set the target of accomplishing 5 metrics in a week to achieve the reasonable goal in six months.
- Once the required data and documents are ready the Higher Education Institution (HEI) can register online on the NAAC website (AISHE code is one of the requirements for Registration). After registering the HEI will receive the login credentials of the institution.
- Submit Institutional Information for Quality Assessment(IIQA) along with the submission of the desired fees. (only three attempts are allowed if it gets rejected).
- Upload the Self Study Report (SSR) within one month of IIQA submission.
- The SSR submitted will undergo the quantitative assessment for pre-qualification which includes Data Validation and Verification (DVV), Student Satisfaction Survey (SSS) and the Bibliometric Data Collection from Inclined.

- The qualitative data will be validated and verified by the Peer Team Visit (PTV).
- Finally, the Grade Declaration will be done once the entire process is finished. The details of Cumulative Grade Point Average (CGPA) scores, their grades and accreditation status are provided in Table 6.

Requirements at institution level that are beneficial for the effective accreditation and outcome

Formation of Internal Quality Assurance Cell (IQAC):

- Chairperson who is Head of the Institution, a few senior administrative officers, three to eight teachers, one member from the Management, one/two nominees from local society, Students and Alumni, one/two nominees from Employers /Industrialists/stakeholders, one of the senior teachers can be assigned the responsibility of: coordinator/Director of the IQAC. The role of IQAC in maintaining quality standards in teaching, learning and evaluation is crucial.8
- Team formation
- Regular internal reviews and yearly academic and administrative audits
- Identification of Institutional uniqueness in terms of quality and best practices.
- Microplanning, execution and review
- Internal evaluation through expert team to check if the preparation is going in right direction
- Suitable, timely documentation
- Robust Feedback system from stakeholders: students, teachers, examiners, alumini, industry partners and collaborators
- Sensitisation of all stakeholders on NAAC in detail starting from the doctors, nursing staff, administrative staff and the security incharge.

The Data Requirements for Self - Study Report (SSR) are

- Executive Summary
- Introductory Note on the Institution: location, vision- mission, type of the institution.
- Criterion-wise Summary on the Institution's functioning with not more than 250 words for each criterion.
- The brief note on Strength Weaknesses Opportunities and Challenges(SWOC) in respect of the Institution.
- Any additional information about the Institution other than ones already stated.
- Overall conclusive explication about the institution's functioning.
- Profile of the Institution. Extended Profile of the Institution.
- Quality Indicator Framework (QIF).
- Data Templates / Documents (Quantitative Metrics).

Accreditation is a process of quality assurance at higher education institution. This encourages reforms and fosters improvement. The consequence on the quality of students has direct impact on perception of the institution, the carrier opportunities of the graduates and global acceptance of an institution. Though the process is rigorous and elaborate, meticulous planning with implementation in a righteous direction offers rewarding outcome. In future appreciative action by every higher education institution facilitates quality culture across the country on par with global standards.

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