

An Overview of Internal Evaluation in Medical Universities and its Consistency with Evaluation Standards

Jalil FathAbadi, PhD¹; Bahram Einollahi, MD²; Seyyed Reza Najafizadeh, MD³

¹Medical Education Expert Ministry of Health Education

²Associate Professor Shaheed Beheshti University of Medical Sciences and Health Services

³Assistant Professor Tehran University of Medical Sciences and Health Services

ABSTRACT

Internal evaluation has started in 1995 in various educational groups of different medical universities. Currently, more than 120 groups are involved in this project. The faculty members have a key role in the process as the main elements of internal evaluation.

Internal evaluation was not only helpful in identifying different practical aspects of education, but also had a prominent role in raising several questions about methodology, objectives, effectiveness and other dimensions of evaluation.

Is the so-called internal evaluation consistent with the scientific criteria of evaluation? Could any better alternative method be found to perform this evaluation in the universities? Does the result of the internal evaluation help the promotion of the education quality?

Many of these questions could be answered by comparing the current evaluations with program evaluation standards.

In this article, the program evaluation standards are considered and the current situation of internal evaluation in medical education units is compared with those standards. The defects of the current evaluations are assessed and necessary recommendations are presented.

Key Words: INTERNAL EVALUATION, PROGRAM EVALUATION STANDARDS

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Introduction

In recent years, most of those involved in medical education were not familiar with several terms and phrases in the field of evaluation. However, these terms have now become well known and numerous articles, lectures and educational references have been presented on this topic. "Internal evaluation" is one of these terms that has attracted more attention. Recently, internal evaluation has been started in medical universities in order to find appropriate ways to improve the quality of education. Some of the units found this project to be useful and made a great effort to perform it (including Semnan, Ahvaz, Kashan, Hamadan and Shahid Beheshti Medical Universities). Now and after these years, there are several questions among the faculty members and those involved in the internal evaluation. These questions could be summarized in one: Is the internal evaluation justifiable, concerning the methodology, objectives, effectiveness and scientific validity?

To answer this question, we should compare the performed evaluations with the program evaluation standards. Program evaluation standards have been developed by educational evaluation experts in order to determine a series of specific criteria for the assessment of performed evaluations. The more consistent with the standards, the more effective, reliable, appropriate and precise the evaluation will be. However, it cannot be expected that one evaluation could fulfill all criteria, because considering the setting and the nature of the programs, some of the standards will be emphasized and some will be overlooked.

It should be mentioned that program evaluation is a general concept and its standards cover all programs in a broad sense, not just the educational programs. Therefore it is possible that some of the standards could be modified in evaluating educational programs.

Golden (1999) believes there are different ways to evaluate a program and various words could be used for this purpose. Terms such as formative evaluation, summative evaluation, process

evaluation, outcome evaluation, or cost-benefit and cost-effectiveness analysis could all be considered a program evaluation. Selecting each kind of evaluation depends on the information that the managers and other stakeholders need for the improvement of the program.

According to this introduction, a definition could be proposed for program evaluation. McNamara (1995) considers program evaluation to be a systematic process for collection, analysis and interpretation of data in order to identify the advantages and disadvantages of a program and the achievement rate of the program's objectives. Accepting this definition, the performed internal evaluation in the medical education groups could be considered a kind of educational program evaluation, and we can judge them by comparing these evaluations with evaluation standards.

Program Evaluation Standards

Utility Standards: Utility standards ensure that the evaluation is performed in a way that will meet the information requirements of the interest groups.

U1. Stakeholder Identification: Those involved in or influenced by the evaluation should be identified, so that their information requirements could be met.

U2. Evaluator Credibility: The evaluators must be both scientifically competent and reliable. Meeting this criterion will maximize the validity and reliability of the evaluation.

U3. Information Scope and Selection: The information must have a large scale and should be gathered from various sources, so that it could provide proper answers to the selected questions and fulfill the requirements of the respective groups.

U4. Values Identification: The viewpoints, methods and logic of the interpretation must be clearly described to clarify the basis of "judgments".

U5. Report Clarity: The evaluation report should define the evaluated program clearly, and include the presentation of the evaluation background, objectives and findings. Thus, the necessary information will be provided easily and understandably.

U6. Timely Dissemination of the Report: The important findings and the evaluation report must be presented to the respective groups so that they could use them in proper time.

U7. Evaluation Impact: The evaluation should be designed, implemented and reported in a way that could attract all stakeholders. Thus, the findings will be more useful.

Feasibility Standards: Feasibility standards ensure that the evaluation will be realistic, conservative, and cost-effective.

F1. Practical Procedures: The evaluation methods should be practical and clear in order to minimize the complexity of collection and application of data.

F2. Political Viability: The viewpoints and opinions of different interest groups should be kept in mind when the evaluation is designed and implemented. These groups will thus cooperate in the project, and probable efforts to interrupt or deviate the evaluation or misuse of its findings by some groups will be neutralized.

F3. Cost Effectiveness: The evaluation should be cost effective and provide valuable information so that it could justify the resources that have been used.

Propriety Standards: Propriety standards ensure that the ethical and legal aspects are considered in the implementation of the evaluation, and those involved in or influenced by the evaluation are not harmed in any way.

P1. Service Orientation: One of the objectives in designing an evaluation is to assist the concerned organizations to identify and fulfill the requirements of all stakeholders. It should be kept in mind that the main objective of evaluation is to provide information for the interest groups.

P2. Formal Agreement: The fidelity of all organizational units to the results of the evaluation should be guaranteed by a written formal agreement (what is going to be done, how, when and by whom). Even the possible future "renegotiation" on the evaluation terms should be noted.

P3. Rights of Human Subjects: The rights of all individuals should be respected in the designation and implementation of the evaluation.

P4. Human Interactions: The evaluators should regard the values and beliefs of those participating in the evaluation so that they would not face any disrespect, harm or threat.

P5. Complete and Fair Assessment: The program should be evaluated completely and each of its advantages and disadvantages should be recorded fairly.

P6. Disclosure of Findings: The formal institutes that conduct the evaluation must guarantee that all of its findings will be provided to those influenced by the evaluation, though admissible limitations should also be considered. In addition, those legally permitted to have access to the results should be informed.

P7. Conflict of Interests: The conflict of interests of different stakeholders is an unavoidable fact in

the process of evaluation. These conflicts should be faced clearly and fairly so that there would be no adverse effect on the evaluation and its results.

P8. Fiscal Responsibility: The evaluator is legally and ethically responsible for the allocation and expenditure of the resources. All expenses should be recorded properly and carefully.

Accuracy Standards: Accuracy standards ensure that the evaluation is technically competent for providing information about the program and can determine its value and quality accurately.

A1. Program Documentation: The program that is going to be evaluated should first be clearly and carefully described and documented.

A2. Context Analysis: The context and background of the program should be examined in full detail in order to determine all factors affecting the program. Context analysis is especially important in data interpretation.

A3. Described Purposes and Procedures: The objectives and procedures of evaluation should be described completely so that other experts could examine and measure them.

A4. Defensible Information Sources: The sources of data collection should be fully described so that their accuracy could be measured.

A5. Valid Information: The methods chosen or developed for data collection must be able to guarantee that the interpretations based on this information (which will be used for specific matters) are relevant and reasonable.

A6. Reliable Information: The methods for data collection should be chosen or developed and then conducted in a way that could ensure the reliability of the information gathered.

A7. Systematic Information: The information collected, analyzed and reported in the course of evaluation should be controlled and assessed systematically and each error must be corrected.

A8. Analysis of Quantitative and Qualitative Information: These data should be systematically and properly analyzed so that they could answer the questions concerning the program.

A9. Justified Conclusions: The results reached by the evaluation should be a clear inference from the available data so that others could reach the same results if they conduct the evaluation separately.

A10. Impartial Reporting: The reporting procedures should be safe against any distortion caused by the evaluator's personal feelings or any other bias. The report should reflect the findings with complete impartiality.

A11. Meta-evaluation: The evaluation itself should be evaluated in different stages and at the end. This evaluation will be based on proper standards and conducted with appropriate procedures.

Consistency of the internal evaluation with program evaluation standards

The first group of standards (utility) indicates that the evaluation should fulfill the informational requirements of the interest groups. In other words, it should be able to clearly demonstrate the program's current situation. This, in turn, depends on some factors; first, the evaluation should be done by experts (U2), because achieving useful information requires the best method to be chosen from a set of different procedures. In the internal evaluation performed in the medical universities, although "the Secretariat of Surveillance, Evaluation and Development" had developed and provided the main structure of the evaluation method, each university followed its own preferred procedure for planning the project. Therefore, different methods were used for the evaluation in spite of the same framework prepared by the Ministry of Health. Evaluation experts can provide useful information about different aspects of these methods.

The second factor in achieving proper information is clear judgment criteria (U4). In the countries that have a long history of educational program evaluation, the educational standards are usually developed and completed over a considerable period of time. In the internal evaluation of the medical universities, the faculty members defined the judgment criteria themselves because of a lack of educational standards in the country. This, in turn, has not only caused bias in some cases, but has also resulted in obscurity in data interpretation; such that most readers cannot understand the logic of the interpretations.

The third factor affecting the achievement of useful information is the clarity of the report (U5). The evaluation report must be prepared in a way that the reader could find the necessary information about the evaluation method and the advantages and disadvantages of the program. This condition was not achieved in most internal evaluation reports because, due to the background of evaluation in the country, the word "evaluation" brings "inspection" or "punishment" to mind. It should also be mentioned that because of the lack of independence among the medical education units, most of the problems root in a level much higher than the medical groups or even schools. However, the facts found in the internal evaluations were never reflected completely in the reports because of the existing impressions, and in some cases, the advantages of the activities were exaggerated. Now, after years of conducting internal evaluation and understanding its real objectives, most of the educational groups are

designing and implementing educational program evaluations without any dependence to the procedures proposed by the Secretariat of Surveillance and Evaluation (e.g. the medical universities of Tehran, Kashan, Kermanshah, Ahvaz and Shaheed Beheshti). This reflects a movement toward more clarity in evaluation.

The second set of standards (feasibility) emphasizes on the practical aspects of the evaluation and the obstacles of performing a correct evaluation. The program evaluation would not be successful unless different groups have a good cooperation with the evaluators and their resistance be eliminated. Since internal evaluation is only conducted by volunteer educational groups, there should not be any resistance or obstacle.

The third group of standards refers to the ethical aspects of the evaluation. According to these standards, the evaluation should be performed with complete honesty and with respect to the rights of all participants. In order to reach a clear definition of the rights and responsibilities of the evaluators and the stakeholders, formal and written agreements should be prepared.

Since most evaluators come from inside of the educational system and the main objective of the internal evaluation is to identify the real advantages and disadvantages of the educational program, and since it is done voluntarily, there would not be any trouble in this regard and there is no need for such formal agreements. On the other hand, participation of all group members in this self-evaluation is by itself a mechanism for respecting other participants' rights.

The fourth set of standards focuses on the scientific principles of evaluation. Considering these standards leads to an evaluation that will be methodologically defensible. From the primary design to the final report, the evaluation should be based on these standards and the evaluation process should be reviewed and criticized in each and every stage. This will prevent biases and uncertainties.

These standards were not thoroughly and favorably considered in the internal evaluation. This was mainly due to the lack of evaluation experts cooperating with the faculty members. The result was that the faculty members were not successful in achieving these standards, although they tried their best. Groups that used evaluation experts (e.g. Semnan, Kashan and Shaheed Beheshti universities) had better achievements.

Conclusion and Recommendation

The internal evaluation in medical education

groups was started when none of the formal educational institutions showed any interest in evaluation and validation issues. However, when we now compare the internal evaluation project with evaluation standards, we can see considerable achievements in many areas. The most important result is that the educational policymakers have now a clear perception of the importance of program evaluation, and considerable efforts are made in this regard in the Ministry of Health and Medical Education and the universities. The faculty members, who were actively involved in the internal evaluation in the recent years, have now become expert forces in designing and performing evaluation in the universities. As the next step, these forces can perform external evaluation of the educational program. And last but not the least, various approaches to evaluation and validation were proposed and criticized in this project.

In spite of all these achievements, the internal evaluation projects have always had problems. First, there was no coordination among different educational units in the Ministry of Health and Medical Education. Second, the management of evaluation in the universities was always a difficult task because the Ministry's executive arms in the universities are not determined. This in turn has imposed some nonprofessional burden on the faculty members and has prolonged the projects too. Finally, a combination of these two problems has prevented a long-term programming for evaluation and validation.

According to this brief review of the advantages and disadvantages of the internal evaluation project, the following activities are recommended: Establishment of "The Medical Education Evaluation Council". Since evaluation requires policymaking at a national level, such institution is necessary for addressing this requirement. It should also supervise the universities' efforts on evaluation and provide concerted guidelines for various activities in order to resolve the current problems in the field of evaluation and validation.

Establishment or equipment of the evaluation units in the universities. The surveillance and evaluation offices, educational development centers, and the faculty members are currently the executive forces of evaluation projects. But their roles and responsibilities are not defined clearly, and most of the burden is practically on the shoulders of faculty members, which consumes much of their time and energy. The activation of "surveillance and evaluation offices" not only reduces this burden, but also makes it possible to conduct the evaluation more effectively and in a shorter time. The best

way for achieving various evaluation standards is to prepare a scheme that covers all aspects. If the evaluation standards are considered before preparing the evaluation project, there will be no worry about inconsistency with these standards. Therefore, the following process has been proposed:

Primary arrangements

- Make a clear definition of the evaluation objectives.
- Specify the interest groups and stakeholders.
- Specify the most important questions that are supposed to be answered by the evaluation.
- Determine the problems and obstacles as much as possible. Take and use the opinions of all experts and be in touch with them during the project.
- Determine the financial and human resources. If you perform the evaluation yourself, you must cooperate with an evaluation expert.
- Specify the evaluation stages and their structure.
- Define the evaluation methods for those involved.
- Specify the basis of judgments and standards.
- Specify each person's responsibility clearly. (The final report editor should be determined.)
- Specify or develop the data gathering instruments.
- Specify the sources of information.
- Collect data: You must choose the sample groups, classify data and exclude inappropriate data.
- Analyze the collected data according to the pre-specified questions and objectives.
- Report the advantages and disadvantages exactly as observed.
- Prepare the report in several levels, if necessary (e.g. for managers, stakeholders, etc).
- Suggest some practical reform plans for evaluation improvement.
- Utilization
- Evaluate the evaluation process and its technical aspects, efficiency and propriety.

- Review the suggestions and develop practical methods to apply them.

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