



ORIGINAL ARTICLE

# Evaluation models and items of clinical competence for the hospital physicians in internal medicine

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## Introduction

The question of the definition of professional competence, its evaluation and its development is of fundamental importance in the current health context, physicians finding themselves working in an environment in which the rapid obsolescence of technical-scientific knowledge imposes upon them a continuous review of their knowledge and ability. Frequent organisational and managerial changes require rapid compliance with definitive innovative models, with

suitable proactive capacities and sufficient response flexibility on the part of the professionals. An in-depth consideration of professional competence is therefore becoming an inescapable requirement under both clinical and the ethical profiles. Compliance with a path of evaluation of one's own working performance represents an essential moment in the continuing development of competence for the physician and an improved capacity to respond to the needs of citizens.

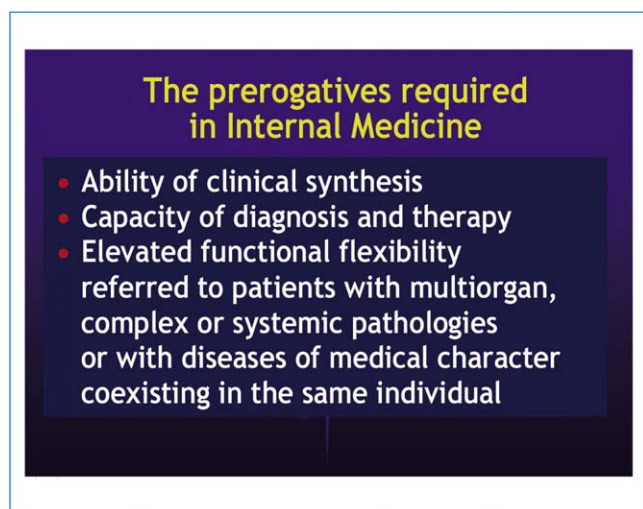
The Mission of Internal Medicine is aimed at improving the quality and efficacy of diagnostic, therapeutic and medical

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**Figure 1** The distinctive prerogatives of Internal Medicine.

institutional services for the adult ill (Fig. 1), guaranteeing the appropriateness of hospital admission and therapy, recognising and treating emergencies so that the hospitalised patient is correctly taken charge of for the definition and management of his/her total course of treatment, until being entrusted to the doctor in charge and/or the network of services. Among the institutional objectives of a scientific association, there is that of representing a “place of culture” in which doctors can develop their own knowledge and their own distinctive competence by means of adherence to the initiatives proposed in the field of research and the training environment, favouring a comparison between different working experiences and clinical practice, and developing the particular characteristics of the discipline it represents.

Anticipating the requirements which could be imposed by future initiatives of accreditation at a regional or national level – by means of legislative or contractual provisions – orienting itself to already consolidated international experiences, FADOI thought it better to construct an experimental route of monitoring and evaluation of the competence of its members who, voluntarily, desire to move away from specialistic self-referentiality and are willing to test themselves using an especially identified system of indicators and good clinical practice. We are strongly convinced that management of this process by means of the active involvement of scientific associations can not only gather important contributions regarding the definition of the performance indicators but also leave enough space for the development of innovative projects which see the direct participation of whoever is involved in daily doctoring and knows the existing situation. This project, originating from a partnership between FADOI and SDA Bocconi, represents the first important step in defining a new role for scientific associations as promoters of the development and continuous monitoring of individual professionalism of the specialist in internal medicine. The intended objective to be pursued is aimed at clarifying the activities, experiences and competence of specialists in Internal Medicine which are necessary to carry out their role of being able to construct a training path based on the detection of acquired knowledge and technical-scientific ability.

The distinguishing characteristics of Internal Medicine are based on the following elements:

- pluripotency, understood as the capacity of developing and integrating knowledge and multiple competences;
- flexibility, which consists of the capacity to adapt and modify intervention priorities both for the individual patient and in response to the epidemiological necessities of the area;
- functional interdependence, with the knowledge that the case mix of patient load requires reciprocal dependence upon various partners but, at the same time, requires a single “director” for each individual case;
- cost-saving measures, which require efficient management of beds (however, they are less expensive when compared to those in highly specialised centres), with a different turnover determined by the frequent hospitalisation of patients with unresolved problems or those with elevated complexity due to the presence of multiple comorbidities and the interaction of physiopathological, clinical and socio-welfare problems.

The summary of the above-mentioned characteristics is oriented towards a professional in continuous training, conscious of his/her own role in the organisational context, with congruent behaviour, multidimensional capabilities and willing to be evaluated (Fig. 2).

Professional evaluation represents a challenge for “cultural” change, required for those who work in the sphere of the health system (public or private affiliate with the national health service), who accept being “observed in a constructive way” with respect to the role that they have, what they do and what they “should do”. It is evident that the process of evaluation has to be characterised by explicit elements which guarantee them objectivity and transparency on the methodology utilised.

The evaluation of competence proposed by FADOI utilises specific reference standards and indicators of a professional nature with the aim of verifying whether the medical director is a “good professional” or sufficiently “expert” in his/her own work, capable of resolving specialistic problems of elevated complexity within his/her field of expertise.

*The project is not proposed as an alternative to decisions and instruments typically institutional and/or private regarding the policies of human resources management but it is proposed as a specific instrument of reference for the formation, evaluation and monitoring of the professional capability of hospital specialists in Internal Medicine.*

### The grid of the “dominions of competence” proposed

The work hypothesis on which the content of “clinical competence” is based is that of defining a grid of evaluation of the competence of the specialist in Internal Medicine with the aim of grading the levels of decisional responsibility and knowledge of the role (useful for achieving a form of institutional accreditation) and of constructing a path of formative progression and professional growth. The final objective is that of outlining paths of professional development suitable for growth in the sphere of the specialistic discipline. To that end, FADOI, in collaboration with SDA Bocconi, has

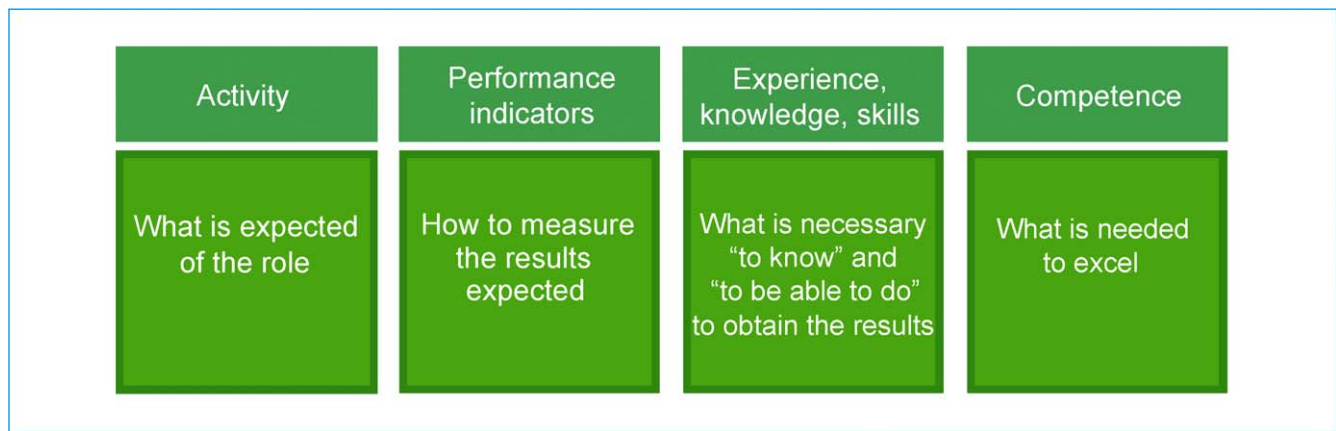


Figure 2 Measurement of the contents of the role of the specialist in Internal Medicine.

designed and realised a path of active interaction with a group of Managers of the Complex Structure of Internal Medicine operating in the entire national territory, for the identification of the professional competence of the hospital directors of internal medicine who want to voluntarily adhere to the project, also with the aim of possible accreditation and/or certification (we refer to the program "Evaluation of clinical competence in Internal Medicine: integration between professional competence and managerial competence of the evaluators, Monday 14 June 2010, SDA Bocconi, Milan).

The map of the competence characteristic of a specialist in Internal Medicine is articulated in two distinct parts, one strictly specialistic/professional and one organisational/managerial relative to personal characteristics, with the following objectives:

- establishing paths of good clinical practice, verifying, validating and improving the professional competence of managers by means of innovative formative methodologies suitable for favouring professional growth;

- facilitating the work of the hospital managers and the hospital directors of Internal Medicine in clinical and managerial activities with the aim of pursuing appropriate management of the resources in agreement with the objectives within this context.

The contents of the project do not currently regard the professional development of the hospital directors of Internal Medicine of any single structure, single departmental structure or complex structure.

In constructing the grid, for the identification of the various *dominions of competence in Internal Medicine* in the various nosological environments, for the most part, the data furnished by Project Minerva, relative to 130 Complex Operative Units (COU) of Internal Medicine and 161,961 hospital discharge records (HDRs) in which the principal pathologies afferent to Internal Medicine Departments, were considered (Fig. 3).

Beginning with this basic epidemiological analysis, the principal pathologies which, for statistical-epidemiological

Project Minerva 130 Internal Medicine units in Italy 161,961 hospital discharge records relative to 2001-2002		
DRG	Diagnosis	No. of cases
127	Cardiac insufficiency and shock	12,956 = 8%
088	Chronic obstructive pulmonary diseases	7,774
014	Specific cerebro-vascular diseases, except TIA	5,830
134	Arterial hypertension	4,858
089	Simple pneumonia and pleurisy, age + 17 years, with complications	4,372
202	Hepatic cirrhosis and alcoholic hepatitis	4,210
395	GR anomalies, age + 17 years, without complications	4,049
294	Diabetes, age + 35 years	4,040
015	TIA and pre-cerebral occlusion	3,725
183	Esophagitis, gastro-enteritis, miscellaneous	3,703
087	Pulmonary edema and respiratory insufficiency	3,077

Wide dispersion of diagnosis related groups: 35 different DRG

Figure 3 Project Minerva (Source: Bellis P. In: Medicina interna. Complessità e metodologia. Torino: CSE, 2004).

**Table 1** Content of the levels of professionalism proposed.

I	II	III	Distinctive competence
<b>Basic professionalism</b>	<b>Optimal professionalism</b>	<b>Excellent professionalism</b>	
Corresponds to essential specialistic competence, such as “ <i>core curriculum</i> ”, minimum basis for access to work (e.g. necessary to carry out the duties in all operating contexts) in an initial phase aimed at a path of additional formation	Corresponds to the best specialistic competence for managing complex patients, practiced according to defined reference parameters, in a consolidated phase of formative development	Corresponds to specialistic competence far superior to the average, also practiced in an institutional <i>setting</i> of high curative intensity, in an advanced phase of formative and didactic development	Corresponds to the specific <i>additional</i> competence, practiced in the sphere of Internal Medicine, in which the professional is a reference for the hospital and/or other professionals, also external, in the sphere of a niche and/or sub-specialistic formative development
Requires supervision and additional training	Is competent to carry out the assigned work autonomously without needing supervision	Is competent to train other professionals in Internal Medicine	Is competent to train other professionals in the specific/ sub-specialistic spheres of Internal Medicine

relevance, importance and gestational criticality were considered the most relevant by the working group, were selected with the aim of specifically analysing the required competence.

In the proposal for the evaluation of professional growth, three different levels in which the acquisition of a higher level presupposes possession of the lower one were selected. The integration and summary of the various levels “*generally*” define the complete path of the specialist in Internal Medicine from which a basic professional can attain an optimal, or excellent, level of professionalism if he “*fully*” responds to the requisites required for each individual level. The levels of “*gradation*” considered epitomize elements referring to knowledge, ability and attitude according to the various phases of formative development and classified as in Table 1.

The concept of “*distinctive competence*” was introduced regarding the capacity of being able to carry out a professional activity at a particular level as a function of each pathology considered and when it is useful to furnish a response to the specific needs of the health of the patient. It can be possessed by the physician *in addition* to that required for specialistic functions and refers to the performance of medical sub-specialistic services.

Regarding the *personal characteristics* of the specialist in Internal Medicine, the FADOI working group and SDA Bocconi defined some priorities relative to the various behavioural capacities taken from the competence model of McClelland – 1973 (2) and the concept of competence, understood in the sense of an “*intrinsic individual characteristic casually linked to an efficacious or superior performance of a task or in a situation, and which is measured on the basis of an established criterion*” (3). The capacities selected (emotional, relational, managerial, intellectual and innovative), subdivided into various levels, represent the integrating feature and consolidation of the personality of an individual, capable of predicting behaviour in a wide range of situations and work tasks, causing and predicting, according to standard

criteria, the positive or negative results obtainable and/or obtained (Table 2).

In addition to these elements, in the evaluation of “*professionals*”, the capacity of the individual physician to adhere to a concept of “*professional interdependence*” in the total hospital context or “*sub-specialistic self-referentiality*” should be considered, generally correlated to the formal role of the individual professionals (Fig. 4).

The basic values of teamwork, such as success factors (“*winning team*”) for each individual team have to be explicitly shared, in function of the objectives, verifying the performance data on the basis of institutional processes and verification audits of the differences with the aim of reaching institutional objectives (Fig. 5).

## Monitoring the differences

### The path of consensus for the elaboration of the final grid

The path followed for the final proposition of the grid was that of delineating, in Fig. 3 using a Delphi-Rand type method which, recognising the value of the opinion, experience and intuition of the experts, permits the use of available information when there is a lack of univocal full scientific knowledge (4).

The path is based on the presentation, by a committee made up of 10 organisers, of the initial elaboration of the grid to a group of 13 “*expert supervisors*” who, independently expressed an opinion, integrating or modifying the content of the draft received. After this revision, the grid was presented to the consensus group (24 chiefs of Internal Medicine and 10 young specialists in Internal Medicine, subdivided into three subgroups) who was asked to review, for the part assigned to each group, the entire project with a critical analysis for each individual item, using three possible options: *complete agreement*, *complete disagreement*, *alternative version*

**Table 2** Selection of the most significant personal characteristics and capacities of each professional level according to the FADOI-SDA BOCCONI working group.

A	B	C
<b>Basic professionalism</b>	<b>Optimal professionalism</b>	<b>Excellent professionalism</b>
	<b>Area: EMOTIONAL CAPACITY</b>	
Self-control and stress management	Self-control and stress management	Self-control and stress management
	Conflict management	Conflict management
	<b>Area: RELATIONAL CAPACITY</b>	
<b>Availability for interpersonal relationships</b>	<b>Availability for interpersonal relationships</b>	<b>Negotiation</b>
Group work	Conviction	Public speaking
Conviction	Public speaking	Management of groups and meetings
Public speaking	Management of groups and meetings	Management of human resources
	Leadership	Leadership
	<b>Area: MANAGERIAL CAPACITY</b>	
Planning one's own work	Organisation	Tenacity/realisation
Organising one's own work	Decisiveness	Planning
Operative control	Orientation to results	Organisation
Initiative		Orientation to results
Tenacity/realisation		
Decision making		
	<b>Area: INTELLECTUAL CAPACITY</b>	
Resolution of operative problems	Gathering and data processing	Analysis
Gathering and elaboration of information	Analysis	Problem solving
	Problem solving	Formulation of plans and strategies
	Compilation of reports	
	<b>Area: INNOVATIVE CAPACITY</b>	
Adaptability/flexibility	Propensity for new things	Propensity for new things
Propensity for new things		

(in that case, it was necessary to specify the propositions suggested). The answers obtained by the panel were followed by a detailed analysis of the opinions (*common or divergent points of view*, with the pertinent reasons, with respect to the initial version), an analytic calculation of the sum of the opinions and the shared convergence, and the elaboration of the definitive proposition.

*In substance, the fundamental objective was that of sharing the final document within FADOI itself and then to present it to the institutions, the medical-scientific community and the citizens directly concerned.*

## What remains to be done?

### Define the modalities for evaluating clinical competence

In the clinical environment: the methods and instruments proposed for the evaluation of professional competence are different (Tables 3 and 4). In the majority of cases, the

services are measured on the basis of the modality of work, or in reference to the "process". Measuring on the basis of treatment, results or volume of activity is more difficult and problematic [1,2].

Apart from the modalities of evaluation that FADOI would like to choose from among the various options available, it must be confirmed that *professional competence is context-dependent*: knowledge, ability, attitude of the specialist in internal medicine are not equal in all operative realities and the abilities required for each individual physician vary on the basis of the characteristics of the health organisation and the clinical context in which one finds him/herself operating. In fact, in large hospitals having the most complete articulation of specialised areas, the modulation of the case mix in departments of internal medicine prevalently tends to exclude patients with marked specialised capabilities, which are, for the most part, entrusted to departments with specific competences, consequently affecting the professional ability of the individual physicians. On the contrary, in small and/or medium-sized hospitals, in the absence of specialised structures, the aptitude required of the specialist in internal

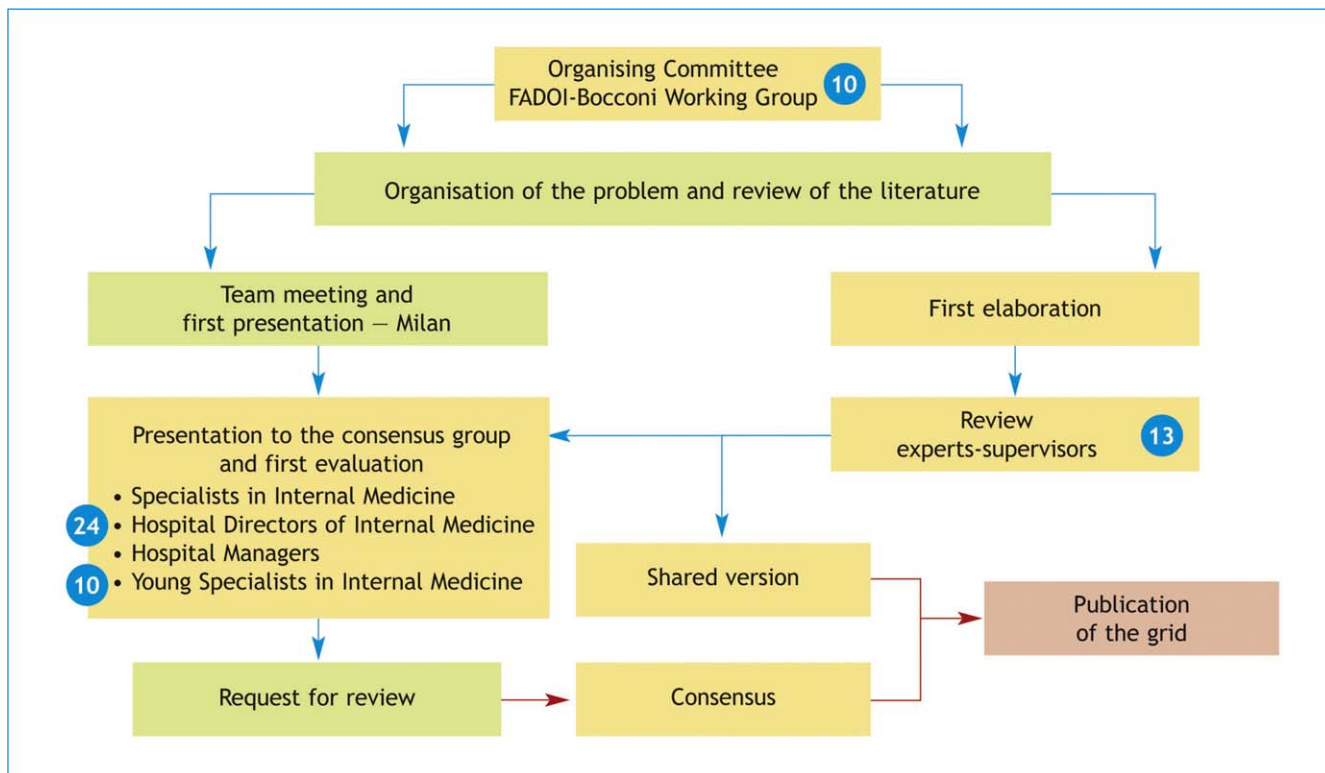


Figure 4 Method applied to the FADOI-Bocconi Project.

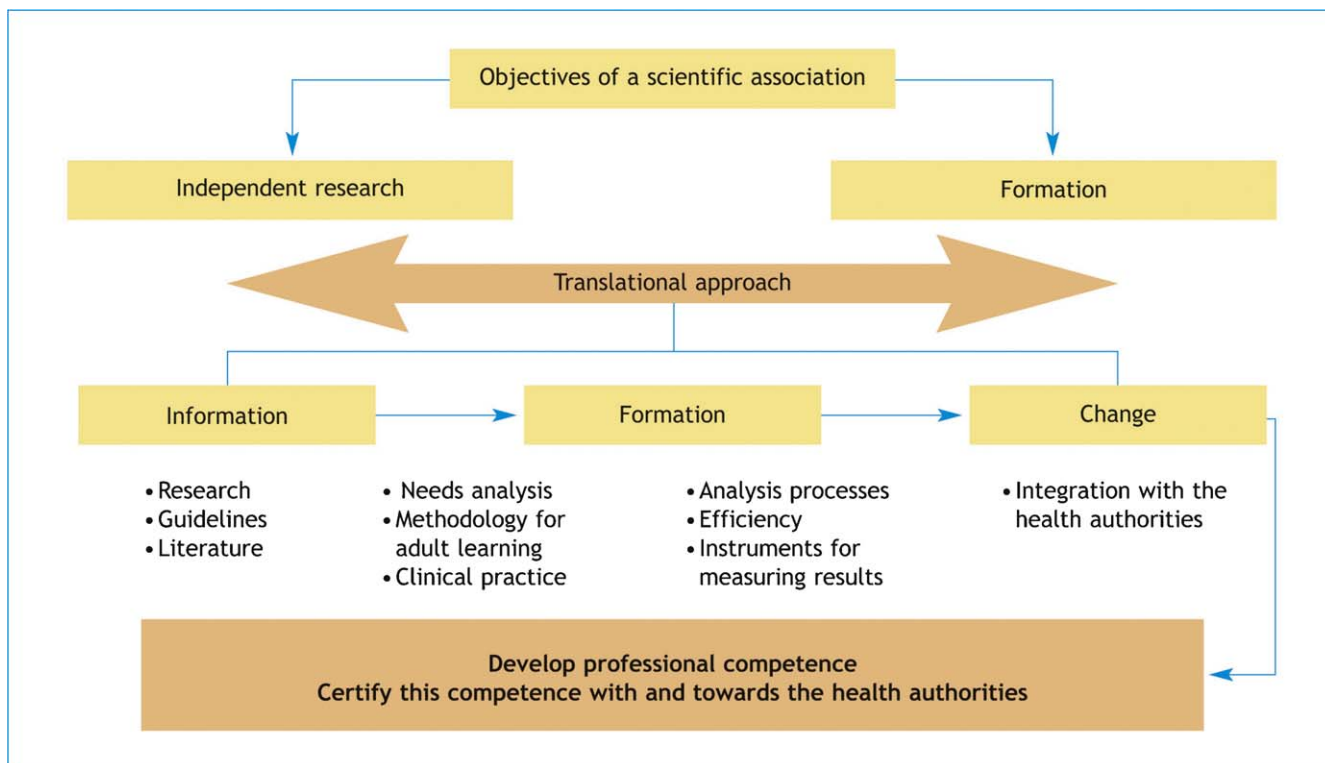


Figure 5 Objectives of a scientific association (Source: Fontanella A. 2010).

**Table 3** Basis and evaluation instruments of professional competence.

Basis of evaluation	Notes	Instruments of evaluation
<b>Results (outcome)</b>	Evaluation is problematic; too many factors influence the results and the outcome of the treatment of the patient, especially if complicated	<ul style="list-style-type: none"> <li>• Hospital charts</li> <li>• Administrative data</li> </ul>
<b>Process/subprocess of treatment<sup>a</sup></b>	Adherence of the physician to the guidelines and/or diagnostic therapeutic paths defined as standard of assistance in the process/subprocess of patient treatment is evaluated	<ul style="list-style-type: none"> <li>• Diaries/registers</li> <li>• Direct observation</li> </ul>
<b>Volume of activity</b>	The procedures carried out are evaluated	

Source: Norcini 2003 [3].

<sup>a</sup> **Process/sub-process:** a process can be defined as a set of activities, organised among themselves as a temporal logic (that is by phases), with the aim of transforming specific input (materials, information, resources, etc.) into output (products, results). Describing the work activity as processes permits understanding their dynamic dimension, namely, their happening in time. A sub-process can be defined as a subset of phases/activities internal to the more general process.

medicine can be extended to specialistic competence otherwise not available at this site. It follows that the formulation of the portfolio (with evaluation of individual professional competence) will have to be adapted to the organisational context and its characteristics. The path of professional development of the individual medical director will have to refer to these differences and the dishomogeneity present in the National Health Service so as to contextualise the evaluating actions in a manner consistent with the specific existing reality. Also for this reason, it will be indispensable to program and realise extended experimentation of the system for evaluating clinical competence in different organisational realities located all over the national territory with the aim of verifying the applicability and utility of the proposed system in the field.

### Defining the path of professional development congruent to the formative objectives

One of the “reasons to exist” of a Scientific Association is that of providing efficacious “training”, useful for developing professional competence (Fig. 6).

The “grid” proposed, *if nothing else*, has the implicit advantage of defining the formative objectives of the hospital specialist in internal medicine. The details are explicit, according to a modulation which can proceed for the different *items* both in different nosological spheres (the “lines” in the grid) and for differentiated increasing specialised levels (the “columns”). The best didactic

**Table 4** Modality of evaluation of professional competence (from [4–15]).

Written evaluation test (evaluation of knowledge)	Evaluation in the field by a supervisor
<ul style="list-style-type: none"> <li>• Multiple-choice quiz (true-false)</li> <li>• The best of 5 multiple-choice quizzes</li> <li>• Pairing of multiple options</li> <li>• Written test</li> <li>• Composition (editing, dissertation) allows the evaluation of knowledge but also the capacity of analysis, synthesis, written expression</li> <li>• <i>Key feature problems</i></li> <li>• Self-evaluation by means of a <i>check list</i> or semiquantitative questionnaires</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Relational and cognitive testing:</b> <ul style="list-style-type: none"> <li>○ resolution and discussion of clinical cases, review of research,</li> <li>○ review of clinical incidents, didactic capacity</li> <li>○ exploring the clinical reasoning regarding a patient</li> <li>○ evaluating the capacity for communication and interaction in a professional group</li> </ul> </li> <li>• <b>Body language testing:</b> direct observation of carrying out procedures:           <ul style="list-style-type: none"> <li>○ to evaluate the knowledge, practical and procedural ability and the attitude of the physician in interaction with the patient</li> </ul> </li> <li>• <b>Relational testing: role play</b> <ul style="list-style-type: none"> <li>○ to evaluate the management of nervous tension, reactivity and capacity of adaptation.</li> <li>○ <b>Direct observation</b> at the “<i>bed-side</i>” or with simulation at a distance/video or with control of the process of assistance and treatment by means of the use of:               <ul style="list-style-type: none"> <li>○ evaluation grids</li> <li>○ check lists</li> <li>○ “<i>blueprint</i>” assessment</li> <li>○ Macro-microsimulation- <i>skill trainer</i></li> </ul> </li> </ul> </li> </ul>

Table 4 (Continued)

Written evaluation test (evaluation of knowledge)	Evaluation in the field by a supervisor
<b>Practical testing (evaluation of ability):</b> Some of the methods proposed	
<ul style="list-style-type: none"> <li>○ OCSE (Objective Structured Clinical Examination)<sup>a</sup></li> <li>○ OSPE; OSVE, OSTE, OSLER, etc.</li> <li>○ PACES [16]</li> </ul>	
Evaluation of:	Instruments
Knowledge	<ul style="list-style-type: none"> <li>● Multiple choice questionnaires (MCQ)</li> <li>● Essays</li> <li>● Short answers</li> <li>● OCSE</li> </ul>
Ability (skills) – case management	<ul style="list-style-type: none"> <li>● Direct observation</li> <li>● Audit</li> <li>● Case reviews or <i>Case Based Discussion</i></li> <li>● Simulation</li> <li>● DOPS [17]: <i>Directly Observed Procedural Skills</i><sup>b</sup></li> <li>● Procedure-based Assessment</li> <li>● Portfolio [18,19] of individual competence</li> <li>● Mini-CEX [20]: <i>Mini Clinical Evaluation Exercise</i><sup>c</sup></li> </ul>
Attitude	<ul style="list-style-type: none"> <li>● Supervision and reporting</li> <li>● Structured <i>Peer review</i> or <i>Peer Assessment Tool</i></li> <li>● Observation-direct or videotaped</li> <li>● Perceived quality</li> </ul>

<sup>a</sup> The *Objective Structured Clinical Examination* (OSCE) is a method of approach for objective evaluation – planned and structured – of clinical competence with its various components. It is actually an organising scheme which permits the evaluation of various abilities but means of standardised and objective testing. OSCE was founded in 1975 by Ronald Harden of the Scottish University of Dundee. Over the years, numerous studies carried out in many countries have confirmed the objectivity, validity and reliability of this method in evaluating the clinical competence of students studying for a degree in medicine. OSCE was then developed, in particular, in those countries in which training was at an advanced level (Canada, United States, England, Australia, South Africa). With modified versions, it then spread to other health professions such as nurses, physiotherapists, dieticians and radiological technicians. It consists of a set of tests (stations) which must be passed by the candidate who, at each station, has to demonstrate what he is capable of doing, faced with a simulated patient or situation, rather than responding to theoretical questions. In OSCE, the evaluation criteria are predefined for each of the stations to pass, corresponding to specific clinical competence and the opinions are expressed, referring to specific evaluation grids, prepared in advance, ad hoc, according to the performance which has to be explored. In OSCE, therefore, some phases preliminary to the evaluation process itself are necessary: a) the definition of the *core competences* to be evaluated; b) the design and development of the testing (stations) and c) the planning and organisation of the stations. The number of stations is *related* to the competence to be evaluated, having a range from a minimum of 10 to a maximum of 25 stations. The time available for the candidate is usually pre-established and limited, a maximum of 10 minutes for the more complex tests, on the basis of the fact that, in real situations, time is always limited. Other instruments of evaluation were added to the OSCE which were, in fact, variants of this: OSLER: *objective structured long examination record*; OSPE: *objective structured practical examination*; OSVE: *objective structured video examination*; OSTE: *objective structured teaching evaluation*; OSPRE: *objective structured performance-related examination*; OSSE: *objective structured selection exam*.

<sup>b</sup> Direct observation of procedural competence (DOPS) is the observation and evaluation of a procedural ability carried out on a real patient. Procedural competence (technical or practical abilities) evaluated on the basis of DOPS vary from those which are relatively simple and common (such as taking a blood sample) to those which are more complex (e.g. endoscopic retrograde colangiopancreatography). The evaluation is carried out by an expert physician utilising a list of items and definite tasks, with a *rating scale* (e.g. *below expectations, 1-2; borderline, 3; within expectations, 4; above expectations, 5-6*).

<sup>c</sup> The portfolio is an instrument prevalently proposed for nurses. It consists of the collection of statements which demonstrates the continuous acquisition of ability, knowledge, attitude, comprehension and results obtained. In it, evidence, usually written, regarding the learning process, attesting to the achievement of objectives of personal and professional development are collected. It includes not only the *curriculum vitae*, but also a grid of self-evaluation to pursue and/or maintain professional competence.

instruments, the strategies and the operative contexts with which to implement the teaching/learning experiences will have to be defined (didactic lessons, face-to-face lessons with debates between the learner and the experts, round tables with debates, technical demonstrations, discussion of problems or didactic cases, films, questionnaires, didactic cases, stimulus flashes, direct execution (simulations) of practical or technical activity on the part of the participants, *role playing*, work in small groups, etc.).

## Defining the path of validation and certification

The process of evaluation is integrated with other elements, represented by validation, accreditation and certification (Table 5).

It is necessary to distinguish certification from evaluation of the results. Evaluation is the expression of a judgment



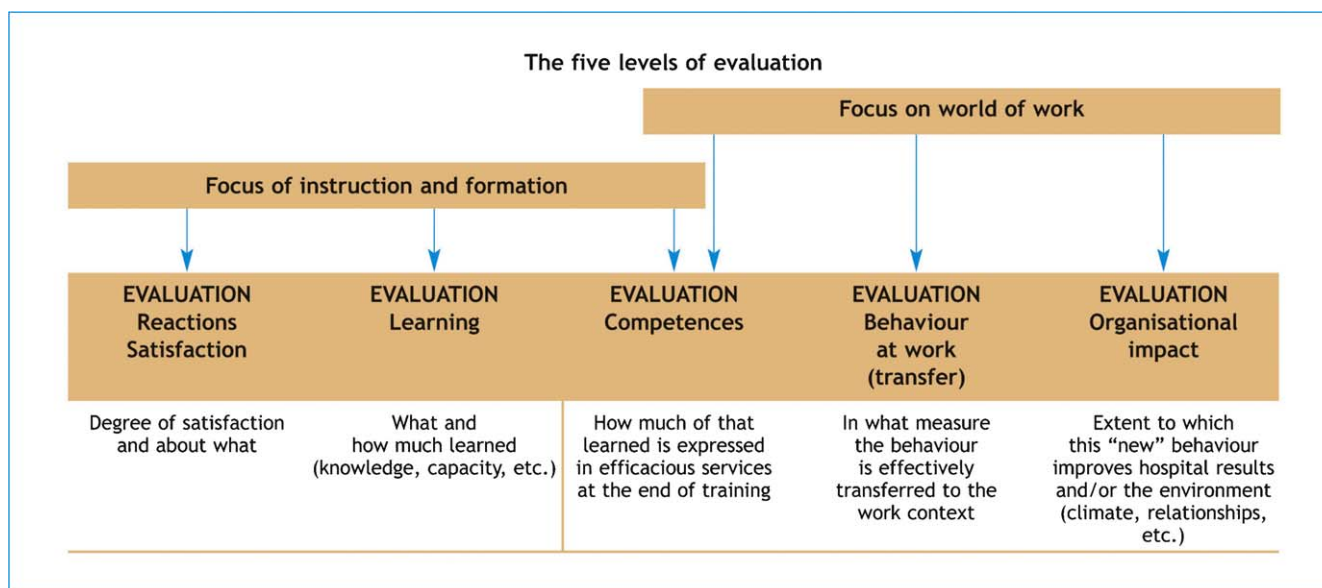


Figure 6 The levels of evaluation.

founded on elements furnished by the verification process which, in turn, is founded on the results of various measurements. Therefore, evaluation represents the result of a complex itinerary. Instead, certification of a competence is the representation of the intentional know how and efficacy reached by the professional described in relation to the context. The affirmation of the competences, expressed in the portfolio, therefore constitutes an added value with respect to individual evaluation. Certification is important since it is useful in defining how much and how to mobilise and make the most of one’s knowledge, capacity and personal resources in order to respond efficaciously (finding an positive point of equilibrium between oneself and the organisation) to questions, expectations and requirements which the work context expresses. FADOI, as a scientific association accredited as a *training provider*, can even now exercise a significant role in the development of the learning and medical-scientific knowledge of the internist; at the same time, it can also be involved by the institutional bodies in accreditation of the different processes of evaluation,

validation and certification, with evident advantages for the individual professional but also for the quality of the formation and the improvement of the institutional context (Table 6).

### Unresolved problems and conclusions

It is evident that the work carried out in the last few months constitutes an indispensable premise, exactly because it is impossible to “credit” or “certify” competence without having first constructed a standard reference curriculum. The definite axes with the grid proposed of the competences (which – moreover – will have to undergo “maintenance” over time) constitute “the fabric” for the construction of paths of learning-formation, oriented to the acquisition of the key competences of the specialist in internal medicine and for the activation of a virtual circle of improvement of clinical practice.

Until now, the work carried out is therefore only partial and exclusively represents the beginning of a long and

Table 5 Processes of verification of professional knowledge.

<b>Evaluation</b>	Process through which the attribution of a judgment of value is reached with respect to the competences acquired, possessed, practised
<b>Validation</b>	Process through which the experience arrived at by the professional is reconstructed, documented and described in terms of competence and then compared to institutionally-defined professional standards
<b>Accreditation</b>	Process through which an agency or a public or private institution “enables” a person to demonstrate that he/she possesses the competences declared, namely taking a qualifying exam in front of a commission
<b>Certification</b>	<p>Process through which the competences acquired by a person in a formal, informal or non-formal context are verified by means of specific tests, relating to professional standards, institutionally defined and recognised publically:</p> <ul style="list-style-type: none"> <li>• aimed at the recognition of formative and professional credits usable in many contexts at the national level</li> <li>• results of a path of “validation” on the part of an agency called to recognise the “credits” presented legally and socially</li> <li>• reached following verification on the part of an expert commission</li> </ul>

**Table 6** The convenience levels of a professional evaluation process.

Advantages of an evaluation path	
<b>For the patient</b>	<ul style="list-style-type: none"> <li>• transparency</li> <li>• objective elements of evaluation</li> <li>• overcoming self-referentiality</li> </ul>
<b>For the individual doctor</b>	<ul style="list-style-type: none"> <li>• better identification and exploitation of one's professional competence</li> <li>• self-analysis of one's strong and weak points of additional formative/professional development</li> <li>• overcoming self-referentiality</li> <li>• elaboration of a congruent and realistic professional project, oriented to specific objectives</li> <li>• (re)motivation, (re)orientation, increase self-esteem/trust (<i>empowerment</i>)</li> <li>• reinforcement to transfer of the competence acquired (mobility)</li> <li>• additional development of one's competence (méta-cognition)</li> <li>• improvement of the quality of the curriculum</li> </ul>
<b>For training</b>	<ul style="list-style-type: none"> <li>• qualitative improvement of the offer and transparency of the training</li> <li>• increase in the efficiency and efficacy of the training offered</li> <li>• personalisation/individualisation/modulation of the formative intervention/participation</li> <li>• recognition of credits (also for additional "modules")</li> </ul>
<b>For the Health Service and the Association</b>	<ul style="list-style-type: none"> <li>• exploitation of human resources and better knowledge of people</li> <li>• better professional quality guaranteed to citizens and transparency</li> <li>• optimisation of career management</li> <li>• greater efficacy/efficiency in selection/incentive processes</li> <li>• facilitation of change</li> <li>• facilitation of adaptation of people to organisational evolution</li> <li>• selection of formative investments</li> </ul>

complex path. It is necessary to put *experimentation of the evaluative model* into actual practice in the organisational structures with the aim of verifying the applicability "in vivo", perfecting the instruments utilised and correcting eventual errors or omissions.

However, the commitment to overcome any possible discrepancy between "evaluation of competence" and "programming for competence" remains. The next challenges awaiting us regard some still ongoing problems on which it will be necessary, as was done for the sharing of the grid of the competences, to find the widest consensus, both inside FADOL and with other institutional interlocutors. There are numerous ongoing problems which remain, such as, for example:

1. willingness (or not) of access to evaluation/certification;
2. practical modalities of evaluation;
3. degrees of learning/certification;
4. minimum standards required for certification
5. levels of certification
6. methods of certification of competence;
7. identification of the certifiers;
8. legal value of certification;
9. when to certify and with what deadline;
10. implications for the development of the career path for the specialist in internal medicine.

The questions to face in the near future are, substantially, numerous and complex. With additional constructive criticism, integrative proposals and/or emendation and the commitment of everyone, together, we will do it.

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### Further reading

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