

Essential Facets of Competence That Enable Trust in Graduates: A Delphi Study Among Physician Educators in the Netherlands

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Abstract

Background There is a need for valid methods to assess the readiness for clinical practice of recently graduated physicians. To develop these methods, it is relevant to know the general features of trainees' performance that facilitate supervisors' trust in their ability to perform critical clinical tasks.

Objective To discover such essential facets of competence (FOCs), based on the opinion of experienced physician educators.

Methods We conducted a Delphi study, consisting of 2 rounds, among 18 experienced physician educators in the Netherlands. Mean, standard deviation, level of

agreement, and skewness were calculated for the importance of FOCs for making entrustment decisions. The study yielded a list of 25 FOCs.

Results In the first round, means were between 6.50 and 7.00 on a 7-point Likert scale (SD, 0.42–2.18); in the second round, means ranged from 5.45 to 6.90 (SD, 0.3–2.02). The level of agreement was high for 92% of the FOCs in the first round and 100% of the FOCs in the second round.

Conclusions Our Delphi study found consensus among experts about FOCs that are important for clinical entrustment decisions.

Editor's Note: The online version of this article contains the following 3 tables: adapted calculation levels of agreement according to the method of De Loe, expert ratings for completeness and clearness, and describing judgments for importance for entrustment decisions of facets of competence in Delphi study.

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Funding: The authors report no external funding source for this study.

The authors would like to thank Karen Hauer for critically reading and editing the English-language manuscript.

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Received December 21, 2011; revisions received March 20, and May 16, 2012; accepted May 29, 2012.

DOI: <http://dx.doi.org/10.4300/JGME-D-11-00324.1>

Introduction

Obtaining a correct impression of medical residents' and fellows' readiness for clinical practice is important for medical educators. This requires a valid method for the assessment of clinical competence, a topic that has occupied the minds of medical educators for decades. Despite multiple reviews and authoritative proposals,^{1–6} clinical educators, evaluators, and examiners in practice still have difficulty assessing medical trainees.⁷ Instruments to assess separate domains of competence in the workplace are scarce⁸ and instruments that focus on specific tasks usually rely on simulated conditions to ensure standardization. The mini-clinical evaluation exercise⁹ and other direct-observation instruments¹⁰ are valuable feedback instruments but the documentation of their psychometric properties is limited to date.^{10,11} One problem may be a lack of validity of those assessment approaches because they do not directly consider the important question of “whether a medical trainee is ready for independent practice” but rather focus on the assessment of particular skills. Traditional checklists established for these purposes may not capture the essence of such entrustment decisions as they insufficiently align with this essential construct.¹² In clinical settings supervisors decide on a daily basis whether to trust a medical trainee with a specific task and to what

extent supervision is needed.^{13–16} Specific tasks pertain to a given procedure or skill that is to be carried out; general features pertain to task-independent characteristics. These general features can be called *facets of competence* (FOCs).

The aim of this study was to uncover general features of trainees that facilitate clinicians' trust of trainees with critical clinical tasks. The research question was: What do experienced clinical educators consider as essential facets of competence that determine decisions to entrust a trainee with critical clinical tasks? Our goal was not to answer this question for specific tasks, but for critical clinical tasks in general. The answer to this question is relevant when developing an instrument to evaluate medical graduates' readiness for practice.

Methods

Design

We used a Delphi technique to investigate consensus and the amount of agreement among experts. The Delphi technique is a widely accepted method for identifying desired features of professionals by eliciting expert opinions in successive rounds.^{17–19} An advantage of the Delphi process is that face-to-face meetings are not required so that there is no risk of peer pressure, and experts from different regions can easily participate in the study. The Delphi technique in our study comprised the following procedure: experts were interviewed with electronic questionnaires, answers were collected, aggregated, and refined throughout 2 rounds. Although panel members did not know the individual answers of the other participants, after each round general feedback was provided to each panel member by summarizing all judgments of the previous round.

At the start of our study, participants received instructions about the study's general objectives. Next, they were asked to judge preliminary descriptions of general facets of competence of medical trainees and subsequently to judge successive revisions in 2 further rounds.

Participants

Participants comprised experienced physician-educators, acquainted with competence levels of starting residents in the Netherlands. We approached all 24 experienced clinicians in the Netherlands who met the following criteria: (1) holding an academic chair in medical education, (2) working in clinical practice, and (3) supervising medical residents.

Instrument Development

We developed a draft questionnaire with a preliminary list of FOCs drawn from a review of the literature on selected competency frameworks and other relevant publications. Three competency frameworks were analyzed, that is, the

What was known

Clinical supervisors need information on attributes of clinical trainees to facilitate decisions to entrust trainees with clinical tasks with indirect supervision or "after the fact" supervision.

What is new

A Delphi study of experts in the Netherlands found consensus on facets of competence that are important for clinical entrustment decisions.

Limitations

Small sample size and use of particular competency frameworks may limit the ability to generalize.

Bottom line

Experts in physician education agreed on general attributes of competence for medical trainees that contribute to a robust approach that allows supervisors to make clinical entrustment decisions.

Canadian CanMEDS framework,²⁰ the Dutch "Blueprint of Objectives for Medical Schools,"²¹ and the competency framework of the General Medical Council in the United Kingdom.²² A qualitative analysis of the FOCs in the different frameworks resulted in an initial list with the relevant FOCs.

The first draft of the relevant FOCs was completed through a literature review regarding important FOCs for clinicians. The literature yielded 3 articles,^{13,23,24} of which two^{13,23} used a holistic approach to the evaluation of medical graduates' competences. Ginsburg et al²³ described characteristics of trainees that influence assessments by supervisors. Sterkenburg et al¹³ focused on factors that guide decisions of supervisors to trust residents with critical clinical tasks. The third article by Kearney²⁴ described the results of a Delphi study exploring the features of professionalism.

We compared these 6 sources (the 3 frameworks and the 3 articles) and found many similarities in content (TABLE 1). We also found differences, mainly in the way the descriptions were ordered and labeled, and in their level of detail. From these sources, we constructed a list of 24 FOCs that met the following criteria: content correspondence with the original source, observable and assessable level of detail, and applicability to medical graduates.

Each of the resulting FOCs was scored on 2 significant aspects for valid competence descriptions: (1) clarity and completeness of formulation; and (2) importance for the entrustment of critical clinical tasks to starting residents. For each FOC a 7-point Likert scale²⁵ was developed that pertained to the following statements: (1) The description of this FOC is complete and clear. (2) This FOC is important for the entrustment of critical clinical tasks to beginning residents. Only the 2 endpoints of the scale were labelled: 1 (strongly disagree) and 7 (strongly agree). Respondents were asked to substantiate their answers with

TABLE 1 FINAL LIST OF FACETS OF COMPETENCE WITH REFERENCES		
No.	Facet of Competence	Source, y
1	<i>Teamwork and collegiality:</i> The physician cooperates effectively and respectfully in a (multidisciplinary) team, taking the views, knowledge, and expertise of others into account.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Kearney, ²⁴ 2005
2	<i>Knowing and maintaining one's own personal bounds and possibilities:</i> The physician knows the boundaries of his own ability and asks for help (timely) when needed. He reflects on himself and the situation.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Sterkenburg et al, ¹³ 2010
3	<i>Role differentiation:</i> The physician is aware of the multiple personal and professional roles he fulfills and behaves accordingly in these roles.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Kearney, ²⁴ 2005
4	<i>Active professional development:</i> The physician aims for quality and professional development by means of a critical attitude towards himself and his environment, study, self-assessment, and reflection, asking for feedback and setting and achieving learning goals. He reacts to criticism constructively and is aware of his own responsibility regarding his own abilities.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Kearney, ²⁴ 2005
5	<i>Coping with mistakes:</i> The physician is aware of the fact that anyone can make and does make mistakes once in a while. He is approachable when someone points out his mistakes and reacts adequately when he thinks that a colleague makes a mistake.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Kearney, ²⁴ 2005
6	<i>Structure, work planning, and priorities:</i> The physician sees the overall picture, has organizational skills and a flexible attitude, and sets priorities in his work.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Sterkenburg et al, ¹³ 2010
7	<i>Responsibility:</i> The physician takes responsibility and shows accountability for his work. He accepts liability for his work.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010; Kearney, ²⁴ 2005
8	<i>Verbal communication with colleagues and supervisors:</i> The physician gives structured, pithy, and unambiguous verbal reports on his findings on a patient and his diagnostic and therapeutic policy. He asks relevant and purposeful questions.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Sterkenburg et al, ¹³ 2010; Kearney, ²⁴ 2005
9	<i>Written (and digital) account/report to colleagues and supervisors:</i> The physician keeps files in a systematic and accurate way and delivers written reports to colleagues and supervisors that are adequate in substance, pithy, and that state his thinking in a clear and explicit way.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Kearney, ²⁴ 2005
10	<i>Empathy and openness:</i> The physician shows empathy, openness, and susceptibility/accessibility in his contact with patients.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Kearney, ²⁴ 2005
11	<i>Adapted informing of patients:</i> The physician informs patients and their relatives in a personally adapted way. He takes account of (among other things) the age, mental development, education, language, and psychologic well-being of the patient and his relatives.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010
12	<i>Respecting privacy and autonomy of the patient:</i> The physician shows respect for the privacy and autonomy of patients and their relatives. He uses his expertise to lead patients in the right direction and takes their choices into account. He follows rules and agreements regarding doctor-patient interactions.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Kearney, ²⁴ 2005
13	<i>Scientific and empirical method of working:</i> The physician uses evidence-based procedures whenever possible and relies on scientific knowledge. He searches actively and purposefully for evidence and consults high-quality resources. He uses his scientific knowledge critically and carefully in his work.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Ginsburg et al, ²³ 2010
14	<i>Ethical awareness:</i> The physician is acquainted with ethical aspects of his work. He distinguishes different points of view in the moral debate and makes deliberate choices when his work confronts him with ethical issues.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009; Kearney, ²⁴ 2005
15	<i>Active listening to patients:</i> The physician listens actively to patients and reacts (verbally and nonverbally) to the things he hears in a way that encourages the sharing of information (by the patients) and confirms his involvement with the patient. He shows attention to nonverbal signals coming from the patients.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
16	<i>Advising patients:</i> The physician advises patients and his relatives about possible diagnostic and therapeutic strategies and possible long- and short-term outcomes.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
17	<i>Handling emotions of patients and their relatives:</i> The physician handles emotional patients and relatives in a proper way. If necessary, he gives attention to fear, sadness, confusion, and anger and asks for help if needed.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009

TABLE 1 FINAL LIST OF FACETS OF COMPETENCE WITH REFERENCES CONTINUED

No.	Facet of Competence	Source, y
18	<i>Attention to individual patient background:</i> The physician is aware of the possible influence of the patient's background and characteristics on the origin and development of health problems and on the doctor-patient relationship. He takes this into consideration when developing his diagnostic and therapeutic policy.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
19	<i>Attention to psychosocial aspects of health problems:</i> The physician gives attention to the illness experience and expectations of the patients and relatives. He is aware of possible psychosocial determinants and effects of health problems.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
20	<i>Attention to relatives and caregivers:</i> Whenever needed the physician involves relatives and caregivers in examination and decision making. During the whole health care contact they will be sufficiently informed.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
21	<i>Active health promotion:</i> The physician looks beyond treatment of current health problems whenever this is relevant and, if this is applicable for his function, actively promotes health by means of prevention and education.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
22	<i>Continuity in the care process:</i> The physician ascertains continuity in the care process by adequate follow-up treatments, aftercare, and purposeful referrals.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
23	<i>Safety and risk management:</i> The physician is alert and critical. He recognizes risks and responds to them in timely fashion. He aims at safety by the use of protocols, where possible, or the deliberate deviation of these protocols for the benefit of the patient. He reports irresponsible behavior.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
24	<i>Financial and social awareness:</i> The physician is aware of the financial aspects of his job and is careful in the use of (limited) resources. He is aware of the costs and benefits health care holds for society.	Frank JR, ²⁰ 2005; General Medical Council, ²² 2009; Dutch Federation of University Medical Centers, ²¹ 2009
25	<i>Coping with uncertainty:</i> The physician accepts that uncertainty belongs to his profession. Notwithstanding this uncertainty, he works decisively.	Dutch Federation of University Medical Centers, ²¹ 2009; Kearney, ²⁴ 2005

comments and to propose improvements for the FOC descriptions. At the end of the questionnaire, respondents were asked to add any new FOCs that they felt were missing.

Data Gathering

Our Delphi study had 2 rounds. For the first round, the list of 24 FOCs was electronically provided to the panelists. On the basis of scores regarding completeness and clearness of the descriptions and the experts' suggestions for improvement of the descriptions, all FOC descriptions were slightly modified. Further, for 2 of the FOCs this resulted in each being divided into 2 separate FOCs, and 2 other FOCs were combined into 1. In a second round, a new list consisting of 25 FOCs, together with a summary of the judgments of the experts in the first round, was sent to the panelists. Participants were asked the same questions as in the first round. For 3 FOCs, multiple-choice questions were added to solicit opinions concerning contradictory or unclear aspects that were made during the first round. Round 2 started 2 weeks after the closing of round 1. In both rounds, the respondents had 2 weeks to complete the questionnaire.

Data Analysis

After each round, a key issue was the decision about whether particular FOCs should be accepted, revised, or deleted. This decision was based on expert ratings on the completeness and clearness of formulation and importance for entrustment decisions. We used experts' mean score to calculate their endorsement of the proposed FOCs.

Next we established the degree of consensus among the experts' judgments by using standard deviations and levels of agreement. For the calculation of the levels of agreement we used a method described by De Loe^{26–28} for a 4-point scale, adapted to a 7-point scale. De Loe designates consensus as “medium” if 70% of the scores are given in 2 (of 4) contiguous scale levels. Because of our 7-point scale, we adapted this criterion to 3 (of 7) contiguous scale levels, which is a slightly more stringent judgment (provided as online supplemental material). However, consensus can only be assumed if judgments tend to be unidirectional.²⁹ Therefore, the skewness of the distributions of the ratings was computed to check on symmetry and to check whether the experts' judgments tended to be in 1 direction.

TABLE 2 EXPERT RATINGS FOR “COMPLETENESS AND CLEARNESS” OF FACETS OF COMPETENCE IN DELPHI STUDY^a

No.	Facet of Competence	Round 1			Round 2		
		Mean	SD	LoA ^b	Mean	SD	LoA ^b
1	Teamwork and collegiality	...	...	...	5.27	1.90	Medium
2	Knowing and maintaining one's own personal bounds and possibilities	5	1.73	Medium	5.36	2.11	High
3	Role differentiation	5.5	1.92	Medium	5.55	1.75	Medium
4	Active professional development	5.9	1.6	High	6	1.41	High
25	Coping with uncertainty	5.4	2.17	High	5	1.76	Low
5	Coping with mistakes				5	1.7	Low
6	Structure and work planning	5.5	1.9	High	5.7	1.16	High
6	Priorities	6	1.16	High			
7	Responsibility	6.6	0.7	High	5.9	1.85	High
8	Verbal communication with colleagues and supervisors	4.55	2.12	Low	5.64	1.43	Medium
9	Written (and digital) account/report to colleagues and supervisors	5.36	2.2	High	6.09	1.14	High
10	Empathy and openness	5.27	1.55	Low	5.82	1.33	Medium
11	Adapted informing of patients	6.09	0.94	High	5.55	1.81	None
12	Respecting privacy and autonomy of the patient	5.64	1.75	Medium	4.82	1.60	Low
13	Scientific and empirical method of working	6.1	1.2	High	5.6	1.51	Medium
14	Ethical awareness	5.9	1.45	High	5.2	1.81	Medium
15	Active listening to patients ^c	5	1.73	None	6.27	1.49	High
16	Advising patients	4.64	1.75	Low	4.82	2.23	Medium
17	Handling emotions of patients and their relatives	5.45	1.29	Medium	4.91	2.02	Low
18	Attention to individual patient background	5.55	1.92	High	5.64	1.03	High
19	Attention to psychosocial aspects of health problems	5.73	1.55	High	5	1.61	Low
20	Attention to relatives and caregivers	6.18	0.98	High	5.36	1.36	High
21	Active health promotion	5.8	1.87	High	6	1.56	High
22	Continuity in the care process	6.2	0.79	High	5.8	1.69	High
23	Safety and risk management	5	1.94	Medium	5.2	1.93	Medium
24	Financial and social awareness	...	...	...	5.4	1.96	Medium
Appropriate use of resources		5.2	1.93	Medium	...	...	...

Abbreviation: LoA, level of agreement.

^a Rating on 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).

^b See SUPPLEMENTAL APPENDIX “Levels of Agreement.”

^c Significant difference between round 1 and 2, $P < .05$.

Our purpose was to revise the FOCs, from experts' judgments and comments, until the list satisfied most experts. Therefore, we made a list of all written comments from the experts, which we used to modify the descriptions of the FOCs. To test the differences between ratings in the 2 rounds on the completeness and clearness of the formulation, we used 2-tailed dependent t tests.³⁰

In accordance with established national practice in the Netherlands, ethical approval is not required for education studies. We made sure that participants could not be identified from any materials presented to other participants, that participation would cause no plausible harm and would be fully voluntary, and that refusal or withdrawal would not incur any adverse consequences.

TABLE 3 EXPERT RATINGS FOR “IMPORTANCE FOR ENTRUSTMENT DECISIONS” OF FACETS OF COMPETENCE IN DELPHI STUDY^a

No.	Facet of Competence	Round 1				Round 2			
		Mean	SD	LoA ^b	Skewness	Mean	SD	LoA ^b	Skewness
1	Teamwork and collegiality	...	...	...	...	5.45	1.51	High	−1.189
2	Knowing and maintaining one's own personal bounds and possibilities	5.73	1.2	High	−1.16	6.82	0.4	High	−1.9
3	Role differentiation	5.82	2.18	High	−1.83	6	1.79	High	−1.79
4	Active professional development	6.8	0.42	High	−1.78	6.7	0.48	High	−1.04
25	Coping with uncertainty	6.7	0.48	High	−1.04	6.6	0.52	High	−0.48
5	Coping with mistakes					6.8	0.42	High	−1.78
6	Structure and work planning					6	0.94	High	−0.99
6	Priorities	6.1	0.99	High	−1.09				
7	Responsibility	6.6	0.52	High	−0.48	5.9	1.85	High	−2.44
8	Verbal communication with colleagues and supervisors	6.73	0.47	High	−1.19	6.73	0.47	High	−1.19
9	Written (and digital) account/report to colleagues and supervisors	6.55	0.52	High	−0.21	6.73	0.47	High	−1.19
10	Empathy and openness	6.91	0.30	High	−3.32	6.9	0.30	High	−3.32
11	Adapted informing of patients	6.73	0.47	High	−1.19	6.64	0.5	High	−0.66
12	Respecting privacy and autonomy of the patient	6.73	0.47	Medium	−1.19	5.91	1.51	High	−1.93
13	Scientific and empirical method of working	6.1	1.29	High	−1.79	6.7	0.48	High	−1.04
14	Ethical awareness	6.2	1.03	High	−1.24	6.3	1.25	High	−2.41
15	Active listening to patients	6.64	0.67	High	−1.8	6.9	0.3	High	−3.32
16	Advising patients	5.82	0.98	High	−0.35	5.91	2.02	High	−1.8
17	Handling emotions of patients and their relatives	5.55	1.51	High	−1.39	6.18	1.25	High	−1.91
18	Attention to individual patient background	5.91	1.76	High	−2.53	5.64	1.5	High	−1.62
19	Attention to psychosocial aspects of health problems	6	1.55	High	−1.97	6	1.48	High	−2.25
20	Attention to relatives and caregivers	6.27	0.65	High	−0.29	5.82	0.75	High	−1.4
21	Active health promotion	5.3	1.89	Medium	−1.41	5.8	1.23	High	−0.43
22	Continuity in the care process	6.3	0.82	High	−0.69	6	1.56	High	−2.18
23	Safety and risk management	6.3	1.25	High	−2.41	5.9	1.52	High	−2.15
24	Financial and social awareness	...	...	...	...	6	1.83	High	−2.74
	Appropriate use of resources	5.4	1.84	High	−1.68	...	...	...	...

Abbreviation: LoA, level of agreement.

^aRating on 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).^bSee SUPPLEMENTAL APPENDIX “Levels of Agreement.”

Results

Eighteen physician educators from 8 different hospitals and 11 disciplines participated in this study. In the first round, 14 participated in the Delphi study (58%), 13 of whom were men. The average age was 59 years (range,

52–66 years). In the second round, 15 experts responded (63%), which included 13 men. The average age was 59 years (range, 49–66 years). The distribution in sex and age in the sample reflects the distribution in the population of physician educators in the Netherlands. Responders in

both rounds represented a wide range of surgical and nonsurgical disciplines (anesthesiology, cardiology, general practice, geriatrics, gynecology, internal medicine, neurology, oncology, pediatrics, rheumatology, and surgery). Eleven experts participated in both rounds, 3 in the first round only and 4 in the second round only.

TABLE 2 shows the expert ratings on “comprehensiveness and clarity” for the descriptions of the FOCs in both rounds of the Delphi study. In the first round means ranged from 4.77 to 6.46 and standard deviations ranged from 0.78 to 2.07. The results of the second round were comparable, with means between 4.82 and 6.27 and standard deviations between 1.03 and 2.23. For the first and the second round, the level of agreement among the experts was medium or high for 83% and 76% of the FOCs, respectively. To test the differences in ratings on comprehensiveness and clarity of the formulations between round 1 and 2, we used dependent *t* tests. This difference was statistically significant for only 1 FOC (“active listening to patients”), based on a 2-tailed *t* test ($t_{10} = 1.5$, $P = .03$, $r = .64$). The mean rating for this FOC in the second round was higher than in the first.

We also asked the panel members to indicate on a 7-point Likert scale the importance of the FOC for entrustment decisions. In the first round these means ranged from 6.50 to 7.00, and in the second round, from 5.45 to 6.90. The level of agreement was high for 92% of the FOCs in the first round and for 100% of the FOCs in the second round (TABLE 3). In both rounds and for both the judgments of “comprehensiveness and clarity” and the judgments of “importance,” all ratings tended toward the “strongly agree” side of the scale, such that in all cases the skewness was negative. After round 2, minor changes were recommended regarding the description of 11 FOCs to complete the final list of 25 FOCs (TABLE 1).

Discussion

This study exemplifies which facets of the general competence of trainees seem to inform the decisions by clinical supervisors to trust them with critical tasks. It is important to map these facets, in light of current approaches to assessment in competency-based medical education.^{31–34}

We made a preliminary list of FOCs, based on competency frameworks and the literature reflecting an international perspective.^{13,20–24} After a Delphi study with 2 rounds, we constructed a list with 25 FOCs. The most important finding was that the experts agreed about the formulation of these FOCs. They strongly agreed that these FOCs are important or very important for the entrustment of critical clinical tasks to starting residents.

Earlier studies about entrustment decisions have shown that these decision processes are complex and relate to several factors.^{13,14} These factors include the characteristics and achieved level of competence of the trainees. In the current study we clarified which FOCs of the trainees appear relevant for entrustment decisions.

Our study is limited by the small number of participants. Further evaluation of the identified FOCs in other countries and different educational climates will be important to enhance generalizability of these findings and inform understanding of entrustability.^{35,36} The validity of our findings could be further supported by evaluating actual entrustment decisions and their relationships with trainees’ FOCs. Finally, our population was selective and not representative of clinical supervisors in general. Participants’ views were informed by their academic background, which could have led to the listing of certain FOCs, although we do not have specific hypotheses in mind to support this concern.

Conclusions

We found consensus support by experts for a list of 25 important FOCs for the entrustment of critical tasks to medical trainees. Our results identified general features of medical graduates that enable supervisors to entrust them with critical clinical tasks. The findings are useful for the development of a valid method for assessing medical graduates’ readiness for clinical practice. The findings may also be useful for frame-of-reference training for clinicians who must regularly make entrustment decisions.⁶

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