Defining competency-based evaluation objectives in family medicine

Communication skills

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Abstract

Objective To provide a pragmatic approach to the evaluation of communication skills using observable behaviours, as part of a multiyear project to develop competency-based evaluation objectives for Certification in family medicine.

Design A nominal group technique was used to develop themes and subthemes and to identify positive and negative observable behaviours that demonstrate competence in communication in family medicine.

Setting The College of Family Physicians of Canada in Mississauga, Ont.

Participants An expert group of 7 family physicians and 1 educational consultant, all of whom had experience in assessing competence in family medicine. Group members represented the Canadian context with respect to region, sex, language, community type, and experience.

Methods The group used the nominal group technique to derive a list of observable behaviours that would constitute a detailed operational definition of competence in communication skills; multiple iterations were used until saturation was achieved. The group met several times a year, and membership remained unchanged during the 4 years in which the work was conducted. The iterative process was undertaken twice—once for communication with patients and once for communication with colleagues.

Main findings Five themes, 5 subthemes, and 106 positive and negative observable behaviours were generated. The subtheme of charting skills was defined using a key-features analysis.

Conclusion Communication skills were defined in terms of themes and observable behaviours. These definitions were intended to help assess family physicians' competence at the start of independent practice.

EDITOR'S KEY POINTS

- An iterative process identified 5 communication themes and 5 subthemes important to family physicians entering practice: listening skills, language skills (verbal, written, and charting), nonverbal skills (expressive and receptive), cultural and age appropriateness, and attitudinal skills.
- The list of observable communication behaviours generated is comprehensive and specific to family medicine, and has construct validity because it emerged from the experiences of a group of expert family physicians.
- This list of behaviours can be used to guide assessments and provide feedback on communication skills in both physician-patient and physician-colleague interactions.

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Préciser les objectifs d'une évaluation des compétences caractéristiques en médecine familiale

Aptitudes à communiquer

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Résumé

Objectif Proposer une approche pragmatique pour évaluer les aptitudes à communiquer à partir de comportements observables, dans le cadre d'un projet de plusieurs années visant à élaborer les objectifs d'une évaluation des compétences caractéristiques pour la certification en médecine familiale.

Type d'étude On a utilisé la technique du groupe nominal pour élaborer des thèmes et des sous-thèmes, et pour identifier des comportements positifs et négatifs permettant d'évaluer la compétence à communiquer en médecine familiale.

Contexte Le Collège des médecins de famille du Canada à Mississauga, Ont.

Participants Un groupe d'experts comprenant 7 médecins de famille et 1 consultant pédagogique, possédant tous de l'expérience dans l'évaluation de la compétence en médecine familiale. Les membres du groupe étaient représentatifs du contexte canadien en termes de région, sexe, langue, type de communauté et expérience.

Méthodes Le groupe a utilisé la technique du groupe nominal pour établir une liste de comportements observables susceptibles de constituer une définition opérationnelle détaillée de la compétence à communiquer; on a utilisé des itérations multiples jusqu'à obtention d'une saturation. Le groupe s'est réuni plusieurs fois par année et sa composition n'a pas changé durant les 4 années de l'étude. On s'est servi du processus d'itération à deux reprises—une fois pour la communication avec les patients et une autre pour celle avec les collègues.

Principales observations L'étude a généré 5 thèmes, 5 sous-thèmes et 106 comportements observables positifs et négatifs. Le sous-thème concernant l'habilité à tenir les dossiers a été précisé à l'aide d'une analyse par caractéristiques clés.

Conclusion L'habileté à communiquer a été définie en termes de thèmes et de comportements observables. Ces définitions visaient à faciliter l'évaluation de la compétence des médecins de famille en début de pratique indépendante.

POINTS DE REPÈRE DU RÉDACTEUR

- Un processus itératif a identifié 5 thèmes et 5 sous-thèmes relatifs à la communication jugés importants pour le médecin qui commence à pratiquer : aptitudes à écouter; aptitudes à s'exprimer (verbalement, par écrit et pour la tenue de dossiers); aptitudes non verbales (expressives et réceptives); comportement approprié aux différences culturelles et à l'âge; et choix d'attitude approprié.
- La liste des comportements observables en matière de communication qui a été générée est détaillée et propre à la médecine familiale, et elle est structurellement valide puisqu'elle provient de l'expérience d'un groupe de médecins de famille experts.
- Cette liste de comportements peut servir à orienter les évaluations et à fournir une rétroaction sur les aptitudes à communiquer, tant dans les rencontres médecin-patient que dans celles entre médecins et collègues.

Cet article a fait l'objet d'une révision par des pairs.
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In 1998, the College of Family Physicians of Canada (CFPC) Board of Examiners decided to review the criteria for Certification in family medicine. The board members observed that family medicine competence was not defined sufficiently to direct the assessment of competence for the purposes of Certification. Members therefore elected to develop a definition to guide future changes in the Certification process. The board grounded the definition of competence in family physicians' work with patients in daily practice. A survey of family physicians was conducted to obtain a description of competence in family medicine.

Initial survey

In the initial survey, responses from 162 of 302 randomly selected CFPC members involved in the national Certification examination showed that family physicians used 5 essential skills, the phases of the clinical encounter, and 99 priority topics to describe competence.[1] The 5 skill dimensions were communication skills, clinical reasoning, selectivity, a patient-centred approach, and professionalism. A sixth skill dimension, procedure skills, was added later. The study did not, however, define interactions among the components, and so it did not provide enough detail to guide evaluation. Competency-based evaluation objectives must reach a certain level of detail to be operational,[2] and this level was not reached. A key-features approach was adopted to provide this further detail.

Key-features approach

The key-features approach is a practical method of defining competence in problem-specific terms for the purpose of assessment.[3] As reported by Lawrence et al, use of this approach identified 773 key features for the 99 priority topics; each key feature was coded to the essential skills required for competent resolution of each problem addressed.[4] Analysis of this coding demonstrated that only 4.4% of the key features required communication skills as a critical component of their resolution. In addition, the individual key features did not define clearly what aspects of communication were required to deal with the problems in question. The key-features analysis in the survey was not sufficiently descriptive to direct the assessment of communication skills.

Importance of competent communication

Physicians must be competent communicators to practise medicine effectively. Communication is 1 of the 6 required competencies identified by the Accreditation Council for Graduate Medical Education.[5] The CanMEDS 2005 framework identified *communicator* as 1 of the 7 essential physician roles.[6]

The essential role of communication skills for practising family physicians is well supported by the literature.[5-11] Communication, like professionalism, is deeply embedded in all clinical encounters. Albanese et al[2] attempted to group educational competencies and found that communication and professionalism were the only competencies common among requirements produced by different stakeholders (ie, the CanMEDS 2005 project, the Accreditation Council for Graduate Medical Education, the American Board of Medical Specialties, and the Institute for International Medical Education). Developing an operational definition of communication skills was therefore critical for guiding the assessment of family physicians at the start of independent practice.

A review of the communication skills literature did not provide a comprehensive list of observable behaviours that could be used to guide assessment of competence. The literature also identifies a gap in ongoing assessment in busy clinical practice. The many effective tools used at the undergraduate level are often too time-consuming to be used regularly at the postgraduate level.[12-15] This has resulted in resident dissatisfaction with their communication skills when they enter into independent practice.[16-18]

In this article, we describe the development of a list of observable behaviours that can be used by residents and faculty in day-to-day assessment and feedback. This will provide ongoing support for the enhancement and the translation into clinical practice of competence in communication skills.

METHODS

An expert group of 7 family physicians with many years of experience in both family medicine program management and clinical teaching used a modified nominal group technique (also known as an *expert panel*)[19] to derive a list of observable behaviours that would constitute a detailed operational definition of competence in communication skills. This group was enhanced by the addition of an evaluation consultant. All members of the expert group had experience in assessing competence in family medicine, and they represented the Canadian context in terms of region, community type, sex, and language. The group collectively practised the full scope of family medicine, including community, inpatient, intrapartum, and emergency care. The group met several times a year, and membership remained unchanged during the 4 years in which the work was conducted.

Multiple iterations were used until saturation was achieved.[20] The specific iterative process is outlined in **Box 1**. It was conducted twice, once for communication with patients and once for communication with colleagues. This distinction evolved from work by Brinkman et al, which demonstrated a lack

Box 1. Iterative process for communication themes and observable behaviours

Step 1: Each member of the expert group independently identified the themes required for communication.

Step 2: The group leader led a discussion among the entire group; a discussion was centred on each theme to ensure that all the critical components were included and basic definitions were provided for each theme. The group leader then led a discussion on all the themes combined.

Step 3: The themes were reviewed in detail, and further definition and rationale were provided for each theme. Wording was refined, and the list was reviewed for completeness.

Step 4: Each member independently identified the observable behaviours for each theme.

Subsequent steps: Steps 2 and 3 above were repeated for observable behaviours under each theme. These behaviours were collected and refined until saturation was achieved.

of correlation between physician-patient and nurse-physician communication in the evaluation of trainee communication.[7] The expert group noted that communication skills relevant to charting were amenable to a key-features analysis, and this analysis was conducted.[1]

RESULTS

The iterative process identified 5 important themes and 5 subthemes: listening skills, language skills (verbal, written, and charting), nonverbal skills (expressive and receptive), cultural and age appropriateness, and attitudinal skills. The final steps of the process described explicit positive and negative observable behaviours for each of the themes derived from participants' experience. Fifty-nine positive and 47 negative observable behaviours were identified. No priority was established for any of the behaviours. **Table 1** presents the list of themes and observable behaviours important for communication with patients, while **Table 2** lists themes and observable behaviours important for communication with colleagues. **Box 2** details the key features for charting competencies.

DISCUSSION

Formal examinations are useful for the assessment of some aspects of competence, but it is usually best to assess skills like communication in the clinical setting because of its authenticity.[21] If programs are to effectively evaluate communication skills, pragmatic tools must be available to help busy preceptors. The Communications Skills section of the CFPC evaluation objectives document, with the themes and lists of observable behaviours, can be accessed from the CFPC website.[22] Field notes and daily clinical encounter cards can generate and document discussion on observable behaviour. By simply observing a resident's behaviour, preceptors can identify a specific weakness or strength and then use the information to assess the resident and provide feedback. The resident or preceptor can ensure this observation, with documentation, continues until the resident's competence is demonstrated, at which time the collected information can be used for summative assessment.

The themes and observable behaviours identified as central to the evaluation of communication skills provide a vocabulary and examples of specific behaviour-based events that are relevant to assessment and that help to engage the learner. Feedback to the learner should refer to specific concrete or observed events. It should be informed by personal, daily observation, and both the provider and the recipient should know and subscribe to the same explicit performance standards,[23] in our case as outlined by the CFPC evaluation objectives. Our list of

Box 2. Key features for charting competencies

- A clinical note must
  - -be legible;
  - -avoid using acronyms or abbreviations that might be misunderstood or confusing (eg, U for units);
  - -be organized to facilitate reading and understanding; and
  - -follow an agreed-upon structure within a practice setting.
- Charting must be done in a timely fashion to minimize inaccuracies and lost information, and to ensure that the information is available for others involved in care. It should usually be done immediately after the encounter; if delayed, notes must be made to direct the later charting.
- Corrections or changes to the note must be clearly visible and must be dated if not made at the time of the original entry.
- You should not write anything in the chart that you would not want the patient to read (eg, disparaging remarks).
- You must not falsify data (eg, do not include data that have not been gathered).
- The clinical note must
  - -reflect all the phases of the clinical encounter that are relevant to the presenting situation;
  - -show an obvious and logical link between the recorded data and the conclusions and plan;
  - -include the relevant negative findings and the relevant positive findings; and
  - -avoid inappropriate verbatim reporting of the encounter (ie, it should synthesize the data gathered).
- As part of ongoing care, acknowledge additional received data (eg, test results, consultation reports) and document follow-up action when appropriate.
- As new information is gathered during an encounter, maintain the chart according to the expectations of the work milieu (eg, flow sheets, summary page).
- Structure and use the clinical record as a tool to try to improve comprehensiveness and continuity of care.

Table 1. Themes and observable behaviours in communication with patients

	OBSERVABLE BEHAVIOURS WITH PATIENTS	
THEMES	APPROPRIATE	INAPPROPRIATE
Listening skills		
• Uses both general and active listening skills to facilitate communication	• Appropriately looks at the patient while the patient is talking • Allows time for appropriate silences • Feeds back to the patient what he or she understood from the patient • Provides appropriate nonverbal responses to the patient's statements • Responds to important cues at all times (eg, it is not appropriate to go on with regular questioning when the patient reveals important life or situation changes such as "I just lost my mother") • Clarifies jargon when used by the patient • Comprehends what the patient says • Lets the patient tell his or her story (does not interrupt the patient inappropriately)	• Does other things while the patient is talking (eg, looks at computer chart, takes telephone calls)
Language skills		
Verbal • Can be understood by the patient • Is able to converse at an appropriate level for the patient's age and educational level • Uses appropriate tone for the situation to ensure good communication and patient comfort	• Asks open- and closed-ended questions appropriately • Checks back with the patient to ensure understanding (eg, "If I say this, am I understanding you correctly?") • Facilitates the patient's story (eg, "Can you clarify that for me?") • Provides clear and organized information in a way the patient understands (eg, test results, pathophysiology, side effects) and checks back to ensure the patient understands • Provides explanations to accompany examinations or procedures • When first meeting a patient, clarifies how the patient would like to be addressed	• Fails to greet the patient • Interrupts the patient inappropriately • Uses inappropriate word choices for the patient's level of understanding (eg, use of scientific language that the patient cannot understand, overuse of jargon) • Displays inappropriate anger • Uses inappropriate humour • Uses paternalistic language (eg, calls the patient "dear") • Uses offensive language (eg, swearing) • Shouts or uses excessively loud speech • Asks multiple questions without awaiting the answers • Has language skills that are insufficient to be easily understood by most patients (eg, patient cannot understand what the physician is saying)
Written • Clearly articulates and communicates thoughts in a written fashion (eg, letters, educational materials, instructions)	• Writes legibly • Written material is organized so that the patient can understand (spelling, grammar and punctuation must be sufficient to permit understanding) • When providing written information, chooses materials that are appropriate to the patient's level of understanding	• Uses abbreviations that are not understood by the patient

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THEMES	OBSERVABLE BEHAVIOURS WITH PATIENTS: APPROPRIATE	OBSERVABLE BEHAVIOURS WITH PATIENTS: INAPPROPRIATE
Nonverbal skills		
Expressive • Is conscious of the effect of body language on communication with the patient and adjusts it appropriately when it inhibits communication	• Sits while interviewing the patient (to convey the feeling of providing the patient more time and attention) • Ensures eye contact is appropriate for the culture and comfort of the patient • Is focused on the conversation • Adjusts demeanour to be appropriate to the patient's context (eg, is pleasant, appropriately smiles, is appropriately serious, is attentive, is patient and empathetic) • Communicates at eye level (eg, children, patients who are bedridden) • Ensures physical contact is appropriate to the patient's comfort	• Fidgets • Hygiene or dress inhibits communication • Gets too close (eg, does not respect others' personal space)
Receptive • Is aware of and responsive to body language, particularly feelings not well expressed in a verbal manner (eg, dissatisfaction, anger, guilt)	• Responds appropriately to the patients discomfort (eg, gets a tissue for a patient who is crying, shows appropriate empathy to the patient's difficulties) • Verbally checks the meaning of body language (eg, "You seem nervous/upset/uncertain/in pain; is that right?") • Comments on behaviour or nonverbal actions of the patient when appropriate (eg, "You seem quiet/unhappy/angry/worried/in pain") • Modifies actions during examination or history taking in response to patient's discomfort (eg, adjusts angle of table when a patient is short of breath during an abdominal examination)	• Misses signs that the patient does not understand what is being said (eg, blank look, look of astonishment, look of puzzlement)
Cultural and age appropriateness		
• Adapts communication to the individual patient for reasons such as culture, age, and disability (eg, young child or teenager, speech deficit, hearing deficit, language difficulty)	• Adapts communication to the adolescent (eg, offers to see the patient independently, respects capacity to make decisions, acknowledges issues of confidentiality, specifically directs questions to the adolescent, is not judgmental) • Adapts communication style to patient's disability (eg, writes for deaf patients) • Asks about need for and arranges for interpreter • Speaks at a volume appropriate for the patient's hearing • Adapts communication style based on the patient's cultural expectations or norms (eg, other family members in the room) • Identifies and adapts manner to the patient's cultural needs • Uses appropriate words for children and adolescents (eg, pee vs void)	• Ignores the patient while exclusively engaging the caregiver, especially with children, the elderly, and patients with cognitive impairment (eg, no questions to the patient, patient not involved in management plan) • Makes assumptions based on patient's appearance or dress (ie, stereotyping) • Uses colloquialisms that the patient does not understand
Additudinal skills		
• This permeates all levels of communication. This includes the ability to hear, understand, and discuss an opinion, idea, or value that might be different from the physician's own, while maintaining respect for the patient's right to decide for himself or herself. Communication conveys respect for the patient	• Expresses interest in the patient's opinion • Is empathetic • Maintains an appropriate attitude in response to inappropriate or offensive language or comments made by the patient	• Appears rude • Appears impatient • Displays irritation or anger • Belittles the patient • Trivializes or dismisses the patient's ideas or concerns • Is sarcastic • Appears intimidating • Appears arrogant (eg, ignores the patient's concerns or opinions about the management plan)

Table 2. Themes and observable behaviours in communication with colleagues

THEMES*	OBSERVABLE BEHAVIOURS WITH COLLEAGUES	
	APPROPRIATE	INAPPROPRIATE
Listening skills		
• Uses both general and active listening skills to facilitate communication	• Is attentive • Stops and takes time to listen respectfully to colleagues • Appropriately maintains eye contact while discussing issues with all members of the health care team • Allows sufficient time for colleagues to articulate their concerns	• Does other tasks that interfere with listening
Language skills		
Verbal • Can be understood in face-to-face communication, and with all other commonly used methods (eg, telephone, video conference, etc) • Can understand complex profession-specific conversation • Uses appropriate language for colleagues with different backgrounds, professions, and education • Uses an appropriate tone for the situation to ensure good communication and colleague comfort	• Introduces self when meeting for the first time • When asking colleagues to do something, makes sure the request is clear and checks that it is understood • Offers rationale for the plan or approach to improve understanding • Is able to adjust tone to be appropriate to circumstances • Asks rather than demands • Uses non-blaming, appropriate, and specific observations when dealing with difficult circumstances	• Case presentations are poorly organized or incomplete • Is not specific with requests • Interrupts colleagues • Asks multiple questions without awaiting the answers • Does not target the language to the individual's professional background and level of understanding • Expresses inappropriate anger • Uses inappropriate humour • Uses condescending language • Shouts or uses excessively loud speech • Swears or uses offensive language
Written (eg, hospital and office charts, consultant letters, lawyer letters) • Clearly articulates and communicates thoughts in writing • Writes legibly and uses spelling, grammar, and punctuation that facilitate understanding	• Writes legibly • Written material is organized • When writing to request consultation, is specific about questions and reasons, and provides relevant information • Writes patient care plans (eg, test requests, follow-up orders) clearly and ensures they are securely transmitted to the appropriate recipient	• Uses abbreviations that are not universally known or are prone to misinterpretation
Nonverbal skills		
Expressive • Uses appropriate eye contact, is respectful of personal space, uses an appropriate demeanour (eg, pleasant, smiles appropriately, is appropriately serious, attentive, patient, and empathetic), is conscious of the effect of body language on the colleague	• Is focused on the conversation • Ensures eye contact is appropriate for the culture and comfort of the colleague • Adjusts demeanour to the colleague's context • Ensures physical contact is appropriate to the colleague's comfort	
Receptive • Is aware of and responsive to body language, especially that expresses dissatisfaction • Correctly interprets signs of feelings not expressed, such as anger and frustration	• When a colleague shows signs of distress, demonstrates awareness by doing things such as modifying demands, exploring concerns, and seeking resolution	
Attitudinal skills		
• Able to respectfully hear, understand, and discuss opinions, ideas, or values that might be different from their own; this permeates all levels of communication	• Seeks to understand rather than to judge • Returns the focus to effective patient care when interprofessional conflicts occur • Attempts to resolve difficulties before ending the discussion or walking away • Apologizes when appropriate	• Is rude • Is impatient • Belittles colleagues or their field of work • Trivializes or dismisses ideas or concerns of colleagues • Is arrogant • Displays anger or irritation • Uses derogatory language when describing a patient's circumstances or case • Is threatening

*Assessment of cultural and age appropriateness is best dealt with in the assessment of other communication skills with the patient and of professionalism.

observable behaviours is similar to but more comprehensive and more specific to family medicine than such lists of behaviours reported by others.[8-10,24-27] It has construct validity, as it is derived from the experiences of a nominal group of expert family physicians.

Limitations

One study limitation pertains to culture, sex, and age appropriateness with colleagues. Observable behaviours were not developed for these themes. Instances might occur in which communication with colleagues and other team members from different cultural backgrounds is problematic. Awareness of these potential problems and subsequent adjustments to communication are elements of competence. Although this limitation is important, the study group believed these particular competencies would be better assessed in the context of communication with patients and in the professionalism skill dimension.

The conclusions reached using the nominal group technique might not represent all community subgroups and might not provide sufficient data. The specific behaviours identified for the skill dimension of communication might not be generalizable to other medical specialties or other countries. However, the comprehensive list of observable behaviours is suitable for the evaluation of communication skills among Canadian family physicians.

Conclusion

Good communication skills are essential for the competent practice of medicine. We have generated a list of observable behaviours that are indicative of good or bad communication skills in the family medicine setting, for both physician-patient and physician-colleague communication. These behaviours can be used to anchor and articulate assessments of communication skills. The clarified list of expected behaviours is particularly useful for guided self-assessment. Each expected behaviour is also situation-specific, which means each behaviour can be used individually or in groups. In this way, it is particularly useful for in-training evaluation, facilitating clear case-specific assessment and feedback in busy practice settings. When behaviours are documented and tracked using field notes or daily clinical encounter cards, they provide a progressive portrait of developing competence. With adequate sampling and a sufficient number of documented observations, this information can become a key component of valid summative assessment.

Further research is necessary to test the effectiveness of observable behaviours and key features in the assessment of competence in communication skills in family medicine. Testing should be conducted by multiple preceptors in different family medicine settings, and possibly in other disciplines and settings.

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Contributors

All authors contributed to the conceptual development of the project, the design of the study, data collection, writing the draft, and editing the final manuscript. **Dr Laughlin** had the additional responsibility of writing the final manuscript.

Competing interests

None declared

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