Medical Student Education

Assessing Communication Competence: A Review of Current Tools

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Background: *The assessment of communication competence has become a major priority of medical educational, policy, and licensing organizations in the United States and Canada. Multiple tools are available to assess communication competence, but there are few studies that compare the tools.* Methods: *A consensus panel of six family medicine educators evaluated 15 instruments measuring the physician-patient interview. The primary evaluation criteria came from the Kalamazoo Consensus Statement (KCS), which derived from a multidisciplinary panel of experts that defined seven essential elements of physician-patient communication. We evaluated psychometric properties of the instruments and other assessment criteria felt to be important to family physicians (exploring family issues, interview efficiency, and usability/practicality).* Results: *Instruments that received the highest ratings on KCS elements were designed for faculty raters and varied in their practicality/usability ratings and psychometric properties. Few instruments were rated high on psychometric properties or exploring family issues.* Conclusions: *The process successfully reviewed and provided a framework for assessing communication skills instruments. There is a need to expand the study, including use of a larger cohort of reviewers to provide more validity to the results and minimize potential biases.*

Physicians must be competent communicators to effectively practice medicine, and communication is one of six required competencies identified by the Accreditation Council on Graduate Medical Education (ACGME).[1] Elements of competent communication are featured in four of the six ACGME competencies. The Association of American Medical Colleges (AAMC) also published recommendations for communication in the Medical School Objective Project, Paper III.[2] The National Board of Medical Examiners (NBME) is requiring Objective Standardized Clinical Examinations (OSCEs) to assess interviewing and communication skills. The Institute of Medicine, in its 2004 report, "Im-

proving Medical Education: Enhancing the Behavioral and Social Science Content of Medical School Curricula," names communication skills as one of six curricular domains.[3] The strong agreement about the importance of competent communication in medical practice challenges medical educators to develop effective tools to determine competence.

Assessing communication competence is complex. Skills that require performance are difficult to assess through disembodied means (such as written tests) but require in-vivo demonstration.[4] Further, competence is not defined solely by the presence or absence of specific behaviors but rather by the presence and timing of effective verbal and nonverbal behaviors within the context of individual interactions with patients or families.[5] Effective communication includes the ability to adapt, to be responsive, and to manage self-awareness during the process of talking and listening. Additionally, effective communication is not only dependent on the observable behaviors of the physician but also on the behaviors and perceptions of patients. What constitutes effective communication in one setting or with

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one patient may be ineffective in another.[6] The variation among patients and the subtleties of effective communication make standardized evaluation difficult.

Increasingly, communication is evaluated to determine a trainee's suitability for promotion, graduation, and licensure. These high-stakes evaluations require assessment instruments with a high degree of reliability, validity, and specified cut-off points, below which trainees do not pass.[7] To achieve a high level of reliability, target skills must be clearly defined, and observers may need to be trained to maximize agreement. Ratings by patients increase validity and add an important dimension beyond the ratings of observers. However, the effort to attain strong psychometric properties by expanding the number of observations and soliciting patient ratings may make the assessment process impractical, especially for smaller residency programs with limited resources.

Despite the complexities of assessing communication skills, medical educators must develop and implement reliable and valid assessment methods. There is little agreement on ideal assessment tools.[7] Options offered by the ACGME and other resources offer few criteria on which an educator can make an informed choice. Checklists and scales vary in their administration, design, focus, psychometric properties, practicality, and ease of use.

Our goal was to conduct a study that evaluated the degree to which available communication assessment instruments measure the essential elements of physician communication. Results from this study will guide family medicine educators to select appropriate tools that assess physician communication competence. This study also may provide guidelines for others developing new instruments and for those refining existing ones.

Methods
Rating Tool

The six reviewers in this study developed a rating form with a 5-point Likert scale, along with a space for comments for each of the evaluation criteria (Table 1). The evaluation criteria included the seven essential elements of physician-patient communication identified in the Kalamazoo Consensus Statement (KCS)[8] (Table 2). The KCS was developed by 21 experts

Table 1

Key Questions of the Appraisal Form

Strongly Agree 1	Agree 2	Neutral 3	Disagree 4	Strongly Disagree 5

1. This instrument supports a valid assessment of each of the following tasks identified by the Kalamazoo Consensus Statement, plus an assessment of family interviewing skills:
   a. Rapport and relationship building—an overarching skill   Rating ____
   b. Opens the discussion   Rating ____
   c. Gathers information   Rating ____
   d. Understands patient's perspective   Rating ____
   e. Shares information   Rating ____
   f. Reaches agreement on problems and plans   Rating ____
   g. Provides closure   Rating ____
   h. Addresses family interviewing skills   Rating ____
   i. Interview efficiency   Rating ____

2. This instrument exhibits well-documented psychometric properties.   Rating ____

3. This instrument is practical and usable by:
   Faculty raters (trained/untrained)   Rating ____
   Standardized patient raters   Rating ____
   Real patient raters   Rating ____
   Trained raters   Rating ____

4. Overall, this instrument is valuable for communication assessment.   Rating ____

Table 2

Kalamazoo Consensus Statement: Essential Elements of Physician-Patient Communication

Essential Element	*Tasks*
Establishes rapport	• Encourages a partnership between physician and patient • Respects patient's active participation in decision making
Opens discussion	• Allows patient to complete his/her opening statement • Elicits patient's full set of concerns • Establishes/maintains a personal connection
Gathers information	• Uses open-ended and closed-ended questions appropriately • Structures, clarifies, and summarizes information • Actively listens using nonverbal (eg, eye contact, body position) and verbal (words of encouragement) techniques
Understands patient's perspective of illness	• Explores contextual factors (eg, family, culture, gender, age, socioeconomic status, spirituality) • Explores beliefs, concerns, and expectations about health and illness • Acknowledges and responds to patient's ideas, feelings, and values
Shares information	• Uses language patient can understand • Checks for understanding • Encourages questions
Reaches agreement on problems and plans	• Encourages patient to participate in decision to the extent he/she desires • Checks patient's willingness and ability to follow the plan • Identifies and enlists resources and supports
Provides closure	• Asks whether patient has other issues or concerns • Summarizes and affirms agreement with the plan of action • Discusses follow-up (eg, next visit, plan for unexpected outcomes)

from medical schools, residencies, and representatives from medical education organizations in North America.

In addition to the KCS criteria, we added two additional dimensions of interviewing: dealing with more than one family member in the room and interview efficiency. The addition of multiple member family interview skills was included because family and friends are frequently present during outpatient and inpatient encounters. Interview efficiency was added because trainees must be able to communicate effectively without losing control of time. Indeed, one result of effective communication may be to enhance time management.[9,10]

The rating form also evaluated three instrument characteristics: psychometric properties, practicality/usability, and overall value. Evaluations of psychometric properties reflect the presence and strength of psychometric data. Practicality/usability is a gestalt evaluation reflecting the raters' judgment about the ease of use when considering who would be using the form, the complexity of form design, and the form length. Overall value was the final rating reflecting a summary or global impression of the entire instrument.

Instruments Rated

Instruments were identified through a review of the literature, personal contacts, and proceedings from national and international conferences attended by the authors. Fifteen instruments were included in the study (Table 3). To be included in the review, assessment instruments (1) directly measured observed encounters between physicians (or medical students) and patients (real, simulated, or standardized) and (2) were designed for use in educational settings and not just for research.[11-28] The instruments were placed in three categories, reflecting the intended rater: observers (eg, faculty), standardized patient, or patients.

Rating Methods

Six of the authors rated each of the 15 instruments. Raters did not communicate with one another about their impressions during the rating process. Each of the raters had at least 10 years of experience teaching communication skills, including many hours observing medical students and primary care residents, and had published on the topic of physician-patient communication.

Data Analysis

To establish a simple method to compare each instrument, we added the number of items (11 possible) receiving mean ratings of equal to or less than 2 (1=strongly agree and 5=strongly disagree) and standard deviations (SDs) less than .8 (Table 4, last column on the left). Two of the reviewers created two of the instruments under review. To minimize bias, their

scores were not included in the summary results of their own instruments. Means and SDs were calculated for all dimensions rated of each instrument. Inter-rater internal consistency for each instrument was measured using Cronbach's alpha. Narrative comments by the reviewers were summarized and discussed after the quantitative results had been tabulated and analyzed.

Results

Tables 4 and 5 indicate our findings. Inter-rater reliability was moderately high (Cronbach's alpha > .79) on all of the instruments. SDs on the 15 instruments ranged from .00 to 1.73 for all raters. Opinions between raters were less divergent on the highest-rated instruments. The highest consistency in content dimensions among raters occurred on ratings of family interviewing skills (mean SD=.60) and on the KCS categories (SD=.73). The lowest occurred on ratings for interview efficiency (mean SD=1.06) (Table 4).

Recently developed instruments received higher scores overall, except in the area of documented psychometric properties. Assessing the psychometric properties of several instruments was difficult due to limited published analyses and validation information. The instruments using patients and standardized patients as raters were less likely to measure the KCS elements.

Ratings of each instrument's usability (ie, practicality, ease of use) are shown in Table 5. The average SD for ratings on the usability dimension by instrument's purpose was 1.91, compared to .76 for the rest of the dimensions. Of the nine instruments designed for observers, five received the highest ratings (mean ratings of 2 or below) when the instrument was completed by a typical faculty observer. However, as shown in the second column of Table 5, several instruments received higher ratings if the instrument was completed by a trained observer. Most of the instruments designed for standardized patients and real patients received usability ratings in the high range.

Discussion

The results of this pilot study indicate that existing communication assessment instruments vary considerably in their content, psychometric properties, and usability. No instrument received high ratings in all of those categories. Instruments designed for faculty observers that received the highest ratings (Kalamazoo, Macy, and MISCE) varied in their ratings for practicality/usability. Few instruments had strong psychometric properties, assessed family interviewing, or had interview efficiency. Only one of the instruments (Common Ground) that had strong psychometric properties had relatively high ratings on the KCS elements. Few instruments assessed family issues and interview efficiency.

Many instruments use checklists (the presence/absence of behaviors) rather than rating scales (assigned

Table 3

Description of Assessment Instruments

Title (Abbreviation)	Contact Person and Contact Information	Reference	Description
FACULTY			
Arizona Clinical Interview Rating Scale (ACIR)	Paula Stillman Refer to citation	Stillman P, et al. Construct validation of the Arizona Clinical Interview Rating Scale. Educ Psych Measure 1977;37(4):1031-8.	17 points rating six different criteria on 5-point behaviorally anchored scales. Criteria sections include organization, timeline transitional statements, questioning skills, documentation, and rapport. (four pages)
Calgary-Cambridge Observation Guide (Calgary-Cambridge)	Suzanne Kurtz University of Calgary Smkurtz@calgary.ca	Kurtz SM, et al. Marrying content and process in clinical method teaching: enhancing the Calgary Cambridge Guides. Acad Med 2003;78(8):802-9.	Guide 1 (Interviewing the Patient)—34 content areas with space for comment on initiating the session, gathering information, building relationship, and closing the session. Guide 2 (Explanation and Planning)—40 content areas on explanation and planning, presenting options, and closing the session. Guide 3 (Content Guide)—areas for comments on problem list, HPI, background/context, differential diagnosis, management plan, and explanation and planning with patient. (six pages)
Common Ground Rating Form (Common Ground)	Forrest Lang East Tennessee State University lang@etsu.edu	Lang F, et al. Communication assessment using the Common Ground Instrument: psychometric properties. Fam Med 2004; 36(3):189-98.	Eight content areas (Rapport, Information Management, Agenda Setting, Active Listening, Addressing Feelings, Reaching Common Ground, Family Interviewing Skills, and Global Performance) utilizing checklists, number of skill occurrences, and space for comments. Observations linked with criteria-defined global assessment scale. (two pages) Has complementary standardized patient rating form and rater feedback form.
Four Habits (4 Habits)	R.M. Frankel Indiana University 317-554-0000	Frankel RM, Stein T. Getting the most out of the clinical encounter: the four habits model. The Permanente Journal 1999; 3(3).	Four Habits (Invest in the Beginning, Elicit Patient's Perspective, Demonstrate Empathy, and Invest in End) with 22 content areas rated on a 5-point Likert scale (one page) with detailed behavioral anchors. (23 pages) Has complementary patient questionnaire. (two pages)
Kalamazoo Essential Elements: The Communication Checklist (Kalamazoo)	G Gordon Gordong@oshu.edu	Makoul G. Essential elements of communication in medical encounters: the Kalamazoo consensus statement. Acad Med 2001; 76(4):390-3.	Seven sections (Build Relationship, Open Discussion, Gather Information, Understand Patient's Perspective, Share Information, Reach Agreement, and Provide Closure) with 22 content areas. Checklist includes done well, needs improvement, not done, or not applicable. Likert scale for overall effectiveness. (one page)
MAAS—Global Rating List for Consultation Skills of Doctors (MAAS)	J van Thiel Department of General Practice, Maastricht University The Netherlands	Van Thiel J, et al. Reliability and feasibility of measuring medical interviewing skills: the revised Maastricht history-taking and advice checklist. Med Educ 1991; 25(3):224-9.	17 skills, with 47 areas to rate, utilizing an 8-point Likert scale, from not present, poor to excellent, not applicable. Space provided to note the number of occurrences of each behavior when called for. (two pages)
Macy Model Checklist—Case Western Reserve University (Macy)	Kathy Cole-Kelly Case Western Reserve University kckelly@ metrohealth.org	Kalet A, et al. Teaching communication clerkships: models from the Macy initiative in health communications. Acad Med 2004;79:511-20.	Eight sections (Prepare, Open, Gather Information, Elicit and Understand Patient's Perspective, Communicate During Physical Exam or Procedure, Share Information, Reach Agreement, Close) and three sections for fundamental skills to maintain during interview (develop and maintain therapeutic relationship, address emotions and feelings, and manage flow), which include 57 content areas. Checklist includes done, done but needs improvement, and not done responses. (two pages)
Medical Interview Skills Competency Evaluation (MISCE)	Timothy Spruill East Orlando Family Medicine Residency Timothy.spruill@ flhosp.org	Spruill T. Approaches to Competency Assessment. 23rd Annual Forum on Behavioral Sciences in Family Medicine, September 30, 2002, Chicago	Seven content areas (Preparation/Greeting, Establishing Focus, Gathering Information, Understanding Patient's/Family's Perspective, Sharing Information, and Providing Closure), using a 5-point behaviorally anchored scale, moving from physician centered (developing), most common (acceptable), to patient centered (exemplary). (one page) Has complementary patient rating scale.

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Table 3

(continued)

Title (Abbreviation)	Contact Person and Contact Information	Reference	Description
The SEGUE Framework (SEGUE)	Gregory Makoul Program in Communication and Medicine, Northwestern Univ. pcm@northwestern.edu	Makoul G. The SEGUE framework for teaching and assessing communication skills. Patient Educ Couns 2001;45(1):23-34.	Six content areas (Set the Stage, Elicit Information, Give Information, Understand Patient's Perspective, End the Encounter, and if suggesting new/modified Rx/prevention plan), utilizing a yes/no checklist. (two pages)
STANDARDIZED AND REAL PATIENTS			
Brown Interview Checklist (BIC)	Dennis Novack Drexel University Dn22@drexel.edu	Novack DH, Dube C, Goldstein MG. Teaching medical interviewing: a basic course on interviewing and the physician-patient relationship. Arch Intern Med 1992;152:1814-20.	Five content areas (Data Gathering, Interpersonal, Information Giving, Organizational Skills, and Patient Satisfaction), with 13 skills to assess on a yes/no checklist, 3-point and 6-point Likert scales. (one page)
Educational Commission for Foreign Medical Graduates (ECFMG)	Gerald Whelan ECFMG Gwhelan@ecfmg.org	Whelan GP. Educational Commission for Foreign Medical Graduates: clinical skills assessment prototype. Med Teach 1999;21:156-60.	Four skill areas (Interviewing and Collecting Information, Counseling and Delivering Information, Rapport, Personal Manner). Each item includes four elements rated on a behaviorally anchored, 4-point Likert scale. (four pages, with a fifth page measuring English language-speaking proficiency)
Interpersonal and Communication Skills Checklist (ICSC)	DS Cohen Refer to citation	Cohen DS, et al. Psychometric properties of a standardized patient checklist and rating-scale form used to assess interpersonal and communication skills. Acad Med 1996;71(suppl 1): S87-S89.	17-element checklist, moving from opening to closing the interview. (one page)
Rochester Communication Rating Scale, 2002 (Rochester)	R Epstein University of Rochester Ronald_Epstein@ urmc.rochester.edu	Epstein RM, et al. Comprehensive assessment of professioinal competence: the Rochester experiment. Teach Learn Med 2004; 16(2):196-9.	18 questions on a 6-point Likert scale, moving from strongly disagree to strongly agree, then not applicable. (one page)
PATIENTS			
American Board of Internal Medicine Patient Assessment for Continuous Professional Development (ABIM)	F. Daniel Duffy Exec. Vice President, ABIM Dduffy@abim.org	Lipner RS, Blank LL, Leas BF, Fortna GS. The value of patient and peer ratings in recertification. Acad Med 2002;77(10 suppl):S64-S66.	17 questions: 10 items rated on a 6-point Likert scale (poor, fair, good, very good, excellent, and unable to evaluate); seven items on demographic data, general health, and use of physician's services. (two pages)
Patient Perception of Patient Centeredness (PPPC)	Moira Stewart University of Western Ontario Moira@uwo.ca	Stewart M, et al. The impact of patient-centered care on outcomes. J Fam Pract 2000;49(9):796-804.	14 questions on a 4-point Likert scale that varies according to the question. (two pages)

Table 4

The Mean and SD Scores for Each Instrument, Organized by Most to Least
Overall Value, Per Kalamazoo Consensus Statement (KCS) Category

Assessment Instrument (Cronbach Alpha)	Rapport	Opens Discussion	Gathers Information	Patient's Perspective of Illness	Shares Information	Agrees on Problem and Plan	Closes	# of KCS criteria with mean ≤ 2 and SD < .8
Faculty								
Kalamazoo	1.8	1.8	1.5	1.6	1.2	1.6	1.33	6
(.88)	.418	.418	.447	.492	.418	.801	.408	
Macy	1.3	1.3	1.2	1.6	1.1	1.8	1.2	6
(.84)	.408	.516	.418	.492	.292	1.60	.408	
MISCE	1.4	1.6	1.5	1.7	1.7	1.5	1.5	6
(.90)	.801	.385	.447	.408	.408	.447	.447	
Calgary-Cambridge	1.7	1.4	1.2	1.6	1.2	1.2	1.2	5
(.95)	.516	.492	.418	.801	.418	.418	.418	
Common Ground*	1.4	1.3	1.8	1.4	2.3	1.3	2.8	5
(.80)	.487	.524	.790	.675	1.54	.619	1.51	
SEGUE	2.3	1.6	1.8	3.0	1.6	1.4	1.6	5
(.90)	.983	.665	.612	1.55	.665	.492	.492	
4 Habits	1.5	1.6	2.0	1.6	1.1	2.0	2.0	4
(.85)	.548	.492	.632	.801	.204	1.05	1.38	
MAAS	3.1	2.0	2.3	1.7	1.6	1.8	2.4	3
(.90)	1.02	.707	.816	.516	.492	.987	1.02	
Arizona (ACIR)	2.7	3.3	1.8	3.5	2.7	4.2	3.3	1
(.86)	1.25	.816	.408	1.0	1.37	.408	.816	
Standardized Patients/Patients								
Rochester*	1.3	1.3	1.8	1.5	1.1	1.4	2.4	5
(.94)	.606	.432	.986	.620	.350	.611	1.10	
ECFMG	1.3	3.8	1.8	4.0	1.4	4.3	2.6	2
(.94)	.516	.612	.880	.850	.492	.983	1.28	
BIC	2.1	2.5	1.6	3.8	2.1	3.5	4.0	1
(.87)	.492	.894	.492	.418	.801	.632	1.26	
ICSC	2.5	2.9	2.1	3.6	3.0	4.5	2.8	0
(.80)	1.38	.801	.665	.492	.707	.548	.880	
Patients								
ABIM	1.67	3.17	2.6	3.5	1.2	2.5	4.1	2
(.88)	.606	.983	1.20	.775	.408	1.378	.905	
PPPC	2.42	2.17	3.2	1.8	2.2	1.3	3.8	2
(.86)	1.43	1.17	1.18	.683	.408	.516	1.60	
Mean SD and # ≤ 2 and SD < .8	.76	.66	.69	.70	.60	.77	.93	
	8	7	9	7	10	7	6	

SD—standard deviation
Kalamazoo—Kalamazoo Essential Elements: The Communication Checklist
Macy—Macy Model Checklist-CWRU School of Medicine
MISCE—Medical Interview Skills Competency Evaluation
Calgary-Cambridge—Calgary-Cambridge Observation Guide
Common Ground—Common Ground Rating Form
SEGUE—The SEGUE Framework
4 Habits—Four Habits Model
MAAS—MAAS-Global Rating List for Consultation Skills of Doctors
ACIR—Arizona Clinical Interview Rating Scale
Rochester—Rochester Communication Rating Scale
ECFMG—Educational Commission for Foreign Medical Graduates
BIC—Brown Interview Checklist
ICSC—Interpersonal and Communication Skills Checklist
ABIM—American Board of Internal Medicine Patient Assessment for Continuous Professional Development
PPPC—Patient Perception of Patient Centeredness

Range is from 1 (strongly agree) to 5 (strongly disagree).
* Authors ratings not included in scores

Table 5

The Mean and SD Scores for Each Instrument, Organized Alphabetically,
Per Non-Kalamazoo Consensus Statement (KCS) Criteria

Assessment Instrument	Family Issues	Interview Efficiency	Psychometric Properties	Overall Value	Usability by Instrument's Purpose	Usability by Trained Raters
Faculty						
Kalamazoo	4.5	2.9	2.3	2.5	2.2	2.7
	.548	1.43	1.02	.775	.418	1.2
Macy	3.1	2.7	3.3	2.0	1.5	1.7
	1.34	1.37	1.47	.316	.548	1.21
MISCE	2.2	2.8	4.0	2.08	1.5	2.0
	.516	1.25	.837	.880	.548	.894
Calgary-Cambridge	4.8	1.3	2.8	2.3	2.5	1.83
	.408	.516	1.12	1.03	1.22	.753
Common Ground*	2.1	3.2	1.9	1.9	2.4	1.5
	1.71	1.47	.604	.483	1.05	.954
SEGUE	5	3.5	2.7	2.6	1.8	1.8
	0.00	1.36	1.45	.584	.612	1.17
4 Habits	4.9	3.8	3.1	2.0	2.2	2.1
	.238	1.42	1.49	.632	1.42	1.50
MAAS	4.5	1.7	1.2	2.0	2.0	1.5
	1.22	.516	.418	0.0	1.10	.547
Arizona (ACIR)	5	2.4	1.8	3.0	1.8	1.7
	0.00	1.14	.758	.945	1.17	.410
Standardized Patients/ Patients						
Rochester*	4.2	3.2	2.2	1.8	1.3	3.1
	1.17	1.08	.779	.702	.619	1.50
ECFMG	4.9	3.9	1.7	3.1	1.9	1.8
	.238	.898	.416	.801	.763	.753
BIC	5	2.2	3.3	3.2	1.9	2.8
	0.00	.418	1.2	.753	.801	.753
ICSC	4.8	3.4	2.2	3.5	2.2	3.7
	.377	1.28	.983	.548	1.17	1.51
Patients						
ABIM	4.7	4.5	2.1	2.8	2	3.2
	.816	.837	.687	.987	.894	1.73
PPPC	4.8	4.3	2.2	2.2	1.5	2.8
	.377	.862	.418	.880	.548	1.73
Mean SD and # ≤ 2 and SD < .8	.60 0	1.06 2	.91 4	.69 6	1.91 6	1.11 4

Range is from 1 (strongly agree) to 5 (strongly disagree).

*   Authors ratings not included in scores

SD—standard deviation
Kalamazoo—Kalamazoo Essential Elements: The Communication Checklist
Macy—Macy Model Checklist-CWRU School of Medicine
MISCE—Medical Interview Skills Competency Evaluation
Calgary-Cambridge—Calgary-Cambridge Observation Guide
Common Ground—Common Ground Rating Form
SEGUE—The SEGUE Framework
4 Habits—Four Habits Model
MAAS—MAAS-Global Rating List for Consultation Skills of Doctors
ACIR—Arizona Clinical Interview Rating Scale
Rochester—Rochester Communication Rating Scale
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BIC—Brown Interview Checklist
ICSC—Interpersonal and Communication Skills Checklist
ABIM—American Board of Internal Medicine Patient Assessment for Continuous Professional Development
PPPC—Patient Perception of Patient Centeredness

weight to an interaction). For less-experienced observers, checklists provide clearer behavioral definitions that may improve reliability.[29] Conversely, experts do as well or better using ratings that use criteria rather than checklists.[29,30] Therefore, a checklist may be the preferred tool when faculty are learning to assess communication skills. Some checklists (Macy, Kalamazoo, and SEGUE) may be useful for faculty with less experience. Instruments that use rating scales (Common Ground, MISCE, MAAS, and Four Habits) might be used when the medical communication expertise of faculty is well developed.

This study shows that patient surveys may not assess communication skills identified in the KCS, suggesting that training programs should include instruments for faculty raters. Patients provide global impressions that are strongly influenced by the degree to which their reason for seeking care is satisfied and by the "halo" or "ceiling effect" that inflates with relationship continuity.[31-33] The Kalamazoo II Report suggests that patient surveys are best used to assess interpersonal skills such as respect, paying attention to patient's nonverbal and verbal cues, being personally present, having a caring intent, and flexibility.[34]

Limitations

There are important limitations to this study. First, the number of reviewers was small, and all of the reviewers work in family medicine education. Second, a rating of each instrument reflected the rater's impressions but does not reflect an equal amount of experience by each rater with each instrument. Third, the group of reviewers, as a whole, shared a belief and common understanding of the KCS and a patient-centered orientation. The perspective of other communication educators without such a patient-centered orientation or the inclusion of other experts from subspecialty or surgical specialties might have altered our results. Fourth, there may be additional criteria, such as the use of nonverbal behaviors or cultural competency, that were not included among the criteria we used. Finally, we could not evaluate all the instruments that have been developed to assess doctor-patient communication. A more comprehensive list of instruments can be found elsewhere.[34] Some of the instruments, such as the SEGUE, were rated for faculty use but have routinely been used for standardized patients as well. The rating process can be improved on by having all raters use all surveys to create a more rigorous and level evaluation of instruments.

Recommendations

The KCS criteria appear to be a good starting point as a guide to choosing instruments to assess physician-patient communication. However, additional criteria may be important to consider, depending on the educational goals. Whether performing formative or summative evaluations, a multi-method approach over multiple encounters is advised, using a faculty instrument to assess communication skills and a patient survey to assess interpersonal skills. For summative evaluations, a preference should be made for instruments with strong reliability and validity measures. However, the strength of psychometric properties should be balanced with the practicality and usability of the measure to match the skill of the rater.

Programs should seek to use assessment criteria that are developmentally appropriate (eg, first year versus third year of training).[34] Faculty development is necessary to promote uniformity in competency assessment and the presence of effective role models.[35]

Future Directions

Future research is needed to increase understanding of how process and content dimensions of communication relate to patient outcomes. Existing competency assessment tools focus more on content than on process. While difficult to measure, methods are needed to assess the degree to which the interviewer is mindfully adaptive, responsive, self-aware, and aware of the other person, the context, and shifts in the interaction. This could be done through patient surveys and by interviewing the physician on these points after observing the evaluated physician-patient encounter. Also, instruments are needed that assess trainees at different levels of training, ranging from medical school through residency.

A larger, more rigorous study should be considered to increase the number of reviewers from six to at least 20, using a Delphi review process. To assess usability/practicality, an additional study could have raters apply each instrument to one–three physician-patient encounters. The usability/practicality dimension could be further broken down into components such as clarity of measured criteria, time needed for recording results, and need for training.

Evidence shows that competent communication by physicians with their patients improves health outcomes, enhances patient satisfaction, and, of equal importance, contributes to physician job satisfaction. The growing effort to assess competency is an opportunity for the entire discipline of medicine to fine-tune the definitions of doctor-patient communication and integrate these components into all levels of medical education. We hope the process, results, and discussion of our review of assessment tools will promote practical, effective solutions and stimulate further research.

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