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Strengthening Interpersonal and Communication Skills Assessment Through Harmonized Milestones

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ABSTRACT

Background The milestones created by the ACGME beginning in 2009 were developed by each individual specialty. The lack of standardization across specialties has resulted in unnecessary variation and has complicated the development of validated assessment tools.

Objective To develop a common set of subcompetencies and milestones that would harmonize the interpersonal and communication skills (ICS) subcompetencies and milestones across specialties.

Methods A group of medical educators with expertise in ICS was recruited by the ACGME and selected 3 subcompetencies specific to ICS: (1) communication with patients and families (ICS-1); (2) communication with teams and other health professionals (ICS-2); and (3) communication within the health care system (ICS-3).

Results A stakeholder survey with 1195 respondents identified that for each of the 3 ICS subcompetencies and milestones, responses demonstrated a higher level of agreement for stakeholders' perception of "should use" and "understands" the given subcompetency, compared to "knows how" to effectively assess it. This held true across all respondent groups by specialty and role in graduate medical education.

Conclusions The majority of stakeholders surveyed understood and believe they should use the 3 new "harmonized" ICS subcompetencies and milestones. Through their implementation and assessment, the ICS Milestones 2.0 will contribute to supporting trainees in the development of communication skills, toward the ultimate goal of improved patient care through better communication with patients and colleagues.

Introduction

The milestones were first introduced as an outcomes-based assessment framework by the Accreditation Council for Graduate Medical Education (ACGME) in 2013 as part of the Next Accreditation System (NAS).[1] They are based on 6 competencies: medical knowledge (MK), patient care (PC), interpersonal and communication skills (ICS), practice-based learning and improvement (PBLI), professionalism (PROF), and systems-based practice (SBP). The initial milestones were created by program directors, faculty, residents, and other stakeholders (eg, ABMS specialty boards, professional organizations, medical educators, nurses) within each specialty, using program requirements, certification examination outlines, curricula, the literature, and national consensus-building exercises [2,3] While this specialty-specific process for creating the milestones was intentional, the significant variability across specialties has been an unintended consequence. A thematic analysis across the 26 primary specialties and transitional year residency showed substantial variability across specialties, with stakeholders indicating dissatisfaction with inconsistencies in the subcompetencies and milestones for ICS, PBLI, PROF, and SBP, reporting that this variability complicates the development of validated assessment tools, and makes faculty development more challenging.[4]

In 2017, the ACGME charged 4 multidisciplinary workgroups to develop shared sets of subcompetencies and milestones for the 4 competencies (ICS, PBLI, PROF, and SBP). The initiative to create these harmonized milestones was the start of Milestones 2.0. The intent was to identify milestones and subcompetencies relevant to trainees across specialties, and select common developmental language. Accredited specialties will integrate the new subcompetencies and milestones into their specialty-specific context as desired. The overall approach is described

in the June issue of the *Journal of Graduate Medical Education*.[5] In this companion paper, we describe the development of the 2.0 Milestones and subcompetencies for ICS.

Milestone Development

The ICS Milestones workgroup consisted of physicians from varying specialties, allied health professionals, medical educators, and other professionals experienced in GME, as well as an expert on communication skills. The ACGME provided resources, guidance, and staff support.

The workgroup initially met in person in November 2016 and reviewed a thematic analysis of the ICS milestones from the ACGME, results of ACGME focus groups, and ACGME data from semiannual milestones submissions. Workgroup members approached the ICS milestones with a shared vision to create timely, relevant, practical, and where possible, evidence-based subcompetency content. The goal was to define shared ICS milestones for trainees across all specialties, while continuing to raise the bar for the future of ICS outcome measurement and assessment.

The workgroup brainstormed key concepts relevant to physician ICS (eg, language awareness, communication with consultants), and iteratively refined the domains specific to ICS. Three broad themes emerged: (1) communication with patients and families; (2) communication with teams and other health professionals; and (3) communication within the health care system. The first 2 themes were broadly aligned with the 2 common ICS themes from the thematic analysis.[1] The third theme showed some overlap with SBP and PROF (coordination and transitions in care, health records, technology, and confidentiality). Earlier work had identified 12 evidence-based communication competencies that aligned with the 3 ICS themes.[6] These themes were further refined into 3 draft ICS subcompetencies.

The workgroup divided into 3 subgroups: 1 dedicated to each subcompetency, to order and group relevant concepts into threads (FIGURE). As with the original milestones, threads spanned the developmental progression from Levels 1 to 5, with anchoring at basic identification and discussion of concepts (Level 1), the skills and behaviors for unsupervised practice (Level 4), and Level 5 continuing to reflect an aspirational level of performance. As anchors were established, additional language was added to fill gaps in developmental progression. After the subgroups had drafted the language for the 3 subcompetencies, the workgroup reconvened to review and further revise the anchoring, language, and contextual relevance across clinical specialties. The working draft of the Milestone 2.0 ICS subcompetencies was shared with attendees at a multispecialty Milestones summit hosted by the ACGME in December 2016. Attendees were asked to provide input. Structured responses generated from attendees provided summative feedback that was shared with the workgroup to further refine the 3 ICS subcompetencies and milestones described below.

FIGURE

ICS1: Patient and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses language and nonverbal behavior to demonstrate respect and establish rapport	Establishes a therapeutic relationship in straightforward encounters using active listening and clear language	Establishes a therapeutic relationship in challenging patient encounters	Easily establishes therapeutic relationships, with attention to patient/family concerns and context, regardless of complexity	Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships
Identifies common barriers to effective communication (e.g., language, disability) while accurately communicating own role within the healthcare system	Identifies complex barriers to effective communication (e.g. health literacy, cultural)	When prompted, reflects on personal biases while attempting to minimize communication barriers	Independently recognizes personal biases while attempting to proactively minimize communication barriers	Role models self-awareness practice while identifying teaching a contextual approach to minimize communication barriers
Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options	Organizes and initiates communication with patient/family by introducing stakeholders, setting the agenda, clarifying expectations and verifying understanding of the clinical situation	With guidance, sensitively and compassionately delivers medical information, elicits patient/family values, goals and preferences, and acknowledges uncertainty and conflict	Independently, uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan	Role models shared decision making in patient/family communication including those with a high degree of uncertainty/conflict
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Comments:				

ICS2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests a consultation	Clearly and concisely requests a consultation	Checks own understanding of consultant recommendations	Coordinates recommendations from different members of the healthcare team to optimize patient care	Role models flexible communication strategies that value input from all healthcare team members, resolving conflict when needed
Respectfully receives a consultation request	Clearly and concisely responds to a consultation request	Checks understanding of recommendations when providing consultation		
Uses language that values all members of the healthcare team	Communicates information effectively with all healthcare team members	Uses active listening to adapt communication style to fit team needs		
	Solicits feedback on performance as a member of the healthcare team	Communicates concerns and provides feedback to peers and learners	Communicates feedback and constructive criticism to superiors	Facilitates regular healthcare team-based feedback in complex situations
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Comments:				

ICS3: Communication within Healthcare Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record	Concisely reports diagnostic and therapeutic reasoning in the patient record	Communicates clearly, concisely, timely, and in an organized written form, including anticipatory guidance.	Models feedback to improve others' written communication
Safeguards patient personal health information	Accurate, timely, and appropriate use of documentation shortcuts Documents required data in formats specified by institutional policy	Appropriately selects direct (e.g. telephone, in-person) and indirect (e.g. progress notes, text messages) forms of communication based on context	Achieves written or verbal communication (patient notes, email, etc.) that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures
Communicates through appropriate channels as required by institutional policy (e.g. patient safety reports, cell phone/pager usage)	Respectfully communicates concerns about the system	Uses appropriate channels to offer clear and constructive suggestions to improve the system	Initiates difficult conversations with appropriate stakeholders to improve the system	Facilitates dialogue regarding systems issues among larger community stakeholders (institution, health care system, field)
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Comments:				

ICS-1: Patient- and Family-Centered Communication

The workgroup identified 3 fundamental Milestone threads relevant to effective patient- and family-centered communication: (1) relationship building; (2) approaches to identify and overcome communication barriers; and (3) strategies to elicit patient and family understanding, values, and expectations with the aim of aligning patient goals and preferences with treatment options.[7,8] Consensus was reached with iterative process focused on anchoring and word choice. For the third milestone thread, added discussion was required, and member opinions varied much more regarding the expectation for progression of skill level for goals of care discussions.

ICS-2: Interprofessional and Team Communication

The health care team was central to the discussion of this subcompetency,[8,9] with the concept of team extending beyond the members of the immediate team to include all who collaborate on the

patient's care (eg, social workers, care coordinators). The workgroup identified 4 threads for this subcompetency: (1) communication when requesting a consultation[10]; (2) communication for providing a consultation[10]; (3) adjustments to communication in team settings; and (4) effective use of feedback. The workgroup repeatedly revised the anchoring and developmental progression for the threads with an emphasis on the trainee demonstrating respect in all these interactions.

ICS-3: Communication Within Health Care Systems

For this subcompetency, the workgroup emphasized 3 threads relevant to effective systems-based communication: (1) documentation in patients' records[11]; (2) selection of method and mode to communicate sensitive information to other professionals[10]; and (3) activation of the health care system to improve specific elements. The focus was on whether trainees effectively utilized these elements to facilitate communication to professionals within the health care system. In the first thread, the developmental progression was from simply documenting information correctly (Level 1) to proficient use of the health record to convey data and clinical reasoning (eg, differential diagnosis) to other professionals (Level 4). The second thread reflects an understanding of challenges for trainees in choosing the most appropriate method and mode of communication for patient related issues across the spectrum of sensitive information (eg, communicating an urgent need for an intervention by placing a telephone call instead of in a written progress note). The final thread was prompted by the evolving role of trainees in quality and systems improvement, requiring them to identify and use communication channels within the system to improve care.

Stakeholder Survey

To engage a national group of stakeholders, and support consensus building, the ACGME created surveys to ask about the harmonized milestones (1 combined survey for all 4

competencies, and dedicated surveys for each competency). The surveys asked for the respondent's role in GME, specialty, and the level of agreement for 3 statements relating to each subcompetency. Level of agreement was based on the number of respondents who selected "agree" or "strongly agree" for each statement.

Results

A total of 1195 (5.4% response rate) completed responses were received from the sample estimated to be 22,000. The largest specialty group was medical-based (48%), and program directors (63%) comprised the largest group by GME role (TABLE 1). More than 80% of responses originated from program directors and program coordinators. TABLES 2 and 3 show the level of agreement for the 3 subcompetency statements by specialty and role in GME. A statement that received over 85% was considered a strong agreement; one that received between 75%–85% was considered acceptable; and a statement that received less than 75% agreement was considered a candidate for further revisions.

TABLE 1
Survey Respondents by Specialty and by Role in Graduate Medical Education (GME)[a]

Specialty	**n of Respondents (%)**
Hospital-based	249 (21)
Medical-based	577 (48)
Surgical-based	205 (17)
GME Role	
Program director	750 (63)
Program coordinator	237 (20)
Faculty	192 (16)
CCC member	107 (9)
CCC chair	59 (5)
Associate program director	74 (6)
Designated institution official	53 (5)
Institutional coordinator	17 (1)
Other	58 (5)

[a] N = 1195. Due to multiple roles, percent do not total 100.

TABLE 2
Survey Data by Overall and Specialty Grouping

		All (n = 1195)	**Hospital (n = 249)**	**Medical (n = 577)**	**Surgical (n = 205)**
ICS-1	1 – Should Use	87.36	77.91	91.51	88.29
	2 - Understand	96.07	98.35	95.59	95.54
	3 – Know How	80.89	72.50	84.88	76.92
ICS-2	1 – Should Use	89.18	86.72	89.85	89.23
	2 - Understand	95.03	98.73	93.43	96.89
	3 – Know How	85.53	83.40	85.82	85.56
ICS-3	1 – Should Use	86.96	86.97	88.76	83.85
	2 - Understand	91.68	94.92	91.12	90.63
	3 – Know How	81.09	82.13	81.21	78.19

TABLE 3

Survey Data by Role in GME

		Program Director (n = 750)	**Associate PD (N = 74)**	**CCC Chair (N = 59)**	**CCC Member (N = 107)**	**DIO (n = 53)**	**Faculty (n = 192)**	**Program Coord. (n = 237)**	**Institut. Coord. (n = 17)**	**Other (n = 58)**
ICS1	1 – Should Use	84.00	86.84	77.97	85.98	96.23	81.25	94.51	100.00	91.38
	2 - Understand	96.21	98.65	96.49	94.39	100.00	95.81	98.28	100.00	93.22
	3 – Know How	78.64	72.97	75.44	79.44	88.68	73.30	90.99	100.00	86.44

ICS2	1 – Should Use	85.85	91.43	88.89	89.11	97.96	87.91	95.43	100.00	90.74
	2 - Understand	94.87	94.29	88.68	97.00	85.71	92.78	98.14	100.00	94.55
	3 – Know How	82.98	87.14	90.57	86.00	82.98	84.83	92.72	100.00	90.91
ICS3	1 – Should Use	84.02	85.07	88.89	90.82	90.00	85.31	96.26	85.71	92.45
	2 - Understand	91.12	92.42	92.45	94.90	88.00	89.14	97.17	85.71	94.44
	3 – Know How	79.24	81.82	86.79	82.65	76.00	78.86	91.04	85.71	79.63

For each of the 3 ICS Milestones and subcompetencies, responses demonstrated a higher level of agreement for “should use” and “understand” compared to “know how” to effectively assess. This was true across all respondents. The survey results (TABLE 2), showed most respondents agreed they understood, (96.1%) and should use ICS-1 (87.4%). A somewhat smaller percentage (80.9%) agreed they knew how to effectively assess this subcompetency.

Most respondents agreed they understood (95.0%) and should use ICS-2 (89.2%); a lower percentage (85.5%) agreed they knew how to effectively assess this subcompetency (TABLE 3). Most respondents agreed they understood (91.7%) and should use ICS-3 (87.0%); fewer (81.1%) agreed they knew how to effectively assess this subcompetency.

Discussion

The inclusion of the 3 harmonized ICS subcompetencies and milestones in Milestones 2.0 represents a continuation of the initial ICS Milestones developed using a multi-step process

similar to what is described here.[3] The formulation of Milestones 2.0 seeks to reduce variability in milestones across specialties, which has contributed to difficulties in establishing consistent assessment tools and faculty development for institutions and nationally. In keeping with this aim, the ICS workgroup prioritized a focus on relevance within the evolving health care environment, and shared basic skills and building blocks that are transferable across specialties and contexts.

Interpersonal and communication skills are recognized as a key attribute of effective physicians, and have been a core component of the ACGME competencies since their inception. Themes in the new ICS milestones emphasize the continued central role of communication in the ever-changing practice of medicine. Effective communication has been linked to better patient outcomes and improved patient satisfaction and compliance with prescribed care.[12] Studies also support the importance of aligning patient and family goals with treatment options.[13,14] The breadth of publications focused on distinct elements of communication interactions detail a challenging landscape of building blocks program directors must address when training, assessing, and remediating trainees in this competency.

Integration of themes highlighting evolving medical practice is present for each subcompetency. ICS-1 acknowledges goals of care discussion and family meeting skills. As above, the importance of this skill set is now recognized more broadly across physician training settings, as are the patient outcomes around alignment of patient goals with treatment options. The ICS-2 subcompetency has an expanded focus, as requesting and providing consultations was identified as a critical skill across specialties. For ICS-3, the workgroup considered the impact of evolving technology while emphasizing the continued need to prioritize patient safety in communications.

Some threads within the new ICS milestones do not span across the 5 developmental levels. For ICS-2, the workgroup defined that proficiency in adapting communication elements as a team member should be attained earlier than graduation. More advanced skills in this continuum seemed to overlap with the other Level 4 milestones in ICS-2 (solicitation or provision of feedback) and with themes in ICS-3. The absence of a Level 1 milestone from thread 4 in ICS-2 should not exclude PGY-1 trainees from the important process of providing feedback, although the workgroup recognized that first-year residents often arrive without these skills, and need time to develop them.

Despite general support for the importance of communication-related milestones, assessment remains a challenge. It is important to determine where, by whom, when, how, and with what instruments the ICS subcompetencies can be measured. Even with Milestones 2.0, challenges remain in the assessment system for the milestones, including a fractured learning environment, lack of time for continuity of clinical experience with patients and faculty, and difficulty evaluating performance on a team.[2]

In addition, single discrete assessments may not represent the actual capacity of the trainee to perform and, some have found they may overestimate the milestone proficiency levels that are aggregated for CCC review.[15] Longitudinal assessment may offer the most benefit, and for some specialties may be easiest in the outpatient setting. The ACGME and the field of GME are moving toward efforts to define potential and suggested assessment strategies in the future.

Despite its limited sample, our stakeholder survey suggests that while the majority of GME stakeholders seem comfortable assessing the ICS milestones, approximately 1 in 5 is not. Trainee performance in this domain requires direct observations of skills in the patient care setting, with scenarios, or using simulation. The use of 360-degree evaluations also may be

useful, as encounters with different health professionals in the learning environment provide residents with opportunities to practice and be assessed on communication skills. As with the other ACGME competencies, training in direct observation of ICS will benefit faculty, and should include how to integrate direct observation into everyday real-time patient care and how to provide effective feedback.

In creating common milestones for ICS, a balance between general principles and specific behaviors was necessary. Program directors may lament that even under Milestones 2.0, the subcompetencies may not allow direct translation into an assessment tool. However, with unifying themes and, to a great extent, common language, and measurement tools may be easier to develop and validate, allowing faculty, peers, and others in the learning environment to provide meaningful feedback to trainees. This will be a rich area for future scholarly work, recognizing that many traditional assessment methods like multiple choice knowledge examinations and self-efficacy measures have limited utility for ICS.

Conclusion

The ACGME Milestones 2.0 ICS workgroup defined 3 subcompetencies with milestones that have been accepted in the GME community as evidenced by a large GME stakeholders survey. Assessment of ICS continues to be a significant but critical challenge as stakeholders implement the new subcompetencies and milestones for trainees. Through their implementation and assessment, the ICS Milestones 2.0 will contribute to supporting trainees in the acquisition of communication skills toward the ultimate goal of improved patient care through better communication.

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