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The most important attribute: stakeholder perspectives on what matters most in a physician

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ABSTRACT

Background Most people can think of important attributes that they believe physicians should have. The CanMEDS framework defines domains of attributes in medical training (Leader, Medical Expert, Scholar, Communicator, Advocate, Collaborator, and Professional). Whether some are more valued by various stakeholders is unknown. Previous research has shown that patients can receive suboptimal care if physician and patient expectations of a health care encounter differ. In the present study, we sought to identify what various stakeholders identified as the single most important attribute for a physician to possess.

Methods A simple survey asked the question "What is the single most important attribute a physician should have?" at a single academic teaching hospital and affiliated medical school. The survey was administered to medical students, doctors, nurses, patients, and caregivers. Age and sex were also collected. Responses were assigned to domains and analyzed to identify trends. The primary outcome is a descriptive analysis of the findings.

Results From 362 individuals who responded, 109 different responses were obtained. The single most common answer was "compassion" ($n = 86$). Responses were categorized into these 5 domains: Caring, $n = 209$; Professional or Collaborator, $n = 58$; Medical Expert, $n = 54$; Communicator, $n = 32$; and Other, $n = 9$. Compared with men, women chose attributes in the Caring domain more frequently (64% vs. 49%), although that domain was the most popular for both sexes. Medical students were less likely to highly value Communicator attributes.

Conclusions All stakeholder group identified attributes in the Caring domain as being most important. Although all CanMEDS roles are important, our research highlights the priorities of stakeholders.

Key Words Stakeholders in health care system, physician attributes, quality of care, medical education

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INTRODUCTION

Most people, when asked, can think of a single most important attribute that they believe physicians should have. The attribute they choose depends on a variety of factors, including the individual giving the response and the role that they hold in the health care system. For example, patients receiving treatment might desire most of all to believe that their physician is an expert in their field, and thus think of clinical acumen or skill as the most important attribute for their physician to possess. In contrast, caregivers of patients might place paramount importance on the ability of the physician to communicate complex ideas or difficult prognoses with clarity. Allied health professionals might prioritize collegiality or professionalism in their physician work colleagues. And so on. Alternatively, all of those assumptions might be wrong, and other patterns—or no patterns—might exist.

Medical schools and residency programs structure their training around the CanMEDS framework, a group of 7 domains in which practising physicians must be competent to deliver effective patient care. Those domains are Medical Expert, Professional, Communicator, Collaborator, Leader, Health Advocate, and Scholar[1]. Although the foregoing domains are those considered most important by the Royal College of Physicians and Surgeons of Canada, they might

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not reflect the priorities of patients and other stakeholders in the health care system. By understanding the opinions of various stakeholders about important characteristics for a physician, a better understanding can be gained of the expectations of those stakeholders in clinical encounters, and indeed might inform priorities in medical training.

Stakeholder expectations of physician characteristics have not been extensively studied, especially since the start of the 2000s. One 1998 study showed that differences in physician and patient expectations as those individuals enter into interactions might result in reduced satisfaction and suboptimal patient care[2]. Another study examined the qualities considered desirable in doctors, but explored only the opinions of patients, and focused primarily on the outpatient general practice setting[3].

In the present study, we asked a cross-section of health care stakeholders what they believed was the single most important attribute in a physician. We hypothesized that stakeholders from different groups would place varying levels of emphasis on the characteristics that they believed to be most important in the physician. By characterizing those differences, we hoped to identify how discrepancies in the expectations of various groups could be addressed to improve patient care.

METHODS

With research ethics board approval, potential respondents were approached between May and August 2018 to take a short survey (Table I) asking for simple demographic data: role in the health care system, sex, and age range. Respondents were then asked "Using one word only, please write down what you think is the single most important attribute a physician should have." After testing by the investigators, it was estimated that respondents would take between 30 and 40 seconds to complete the 1-page survey. Respondents could take the survey in either English or French.

Respondents were recruited at The Ottawa Hospital Cancer Centre, either in clinics, multidisciplinary meetings, physician and nurse meetings, the chemotherapy or radiotherapy treatment units, or the oncology inpatient unit. Approximately 100 physicians and about 200 nurses regularly attend or work in the cancer centre. Medical students were approached at the beginning of lectures. They were asked to complete the paper surveys face-to-face; the results collected were anonymized. Participation was voluntary. The goal was to recruit 100 respondents from each stakeholder group.

Inclusion criteria were:

- Age 18 years or older
- Health care role of medical student, physician, nurse, patient, or caregiver
- If a medical student, the individual had to be in year 1 or 2 of training (that is, pre-clerkship) in the Faculty of Medicine at the University of Ottawa

The answers to the "most important attribute" question were reviewed by the authors (PWP, DC) for conformance to the parameters of the survey. Multiple-word answers were reduced to 1 word. If multiple attributes were offered in a single answer, only the first attribute was used. Answers in French were translated by the authors (DB, DC) to the closest English word that matched the meaning of the original French term. Answers were then grouped into 5 overarching domains (Clinician or Medical Expert, Communicator, Caring, Professional or Collaborator, and Other; Table II). When a single attribute could potentially be categorized into multiple domains, a consensus decision about which domain it would ultimately belong to was reached between the authors.

Respondent answers were then grouped by the age, sex, and health care role of the respondent. The resulting data were tabulated and analyzed using the Fisher exact test, with a significance threshold of $p = 0.05$. Pairwise comparisons were undertaken for the cohorts stratified by age and by health care role.

TABLE I English version of survey questionnaire given to respondents

The most important attribute for a physician to have
A general survey

Thank you for agreeing to take part in this short questionnaire. Completing this should take no more than 30 seconds and your participation is taken as consent. This survey is voluntary and anonymous, with nothing to link you to the answer or overall results.

There are 4 questions:

1. Are you (please select the most appropriate answer, but only one)?
   - A patient
   - A caregiver
   - A medical student
   - A nurse
   - A doctor
2. Are you (please circle)?
   - Female
   - Male
3. Are you aged (please circle)?
   - <25 years old
   - 25–40 years old
   - 41–60 years old
   - 61–80 years old
   - ≥81 years old
4. Using one word only, please write down what you think is the single most important attribute a physician should have:

   _____

RESULTS

Over the duration of the study period, 362 individuals completed the survey, with 336 responding in English, and 26, in French. Table III summarizes relevant respondent characteristics, including age, sex, and health care role.

In total, 109 different responses were given, with the single most commonly favoured attribute being compassion ($n = 86$), followed by empathy ($n = 51$), and knowledge ($n = 17$).

When categorized by domain, the most common domains were Caring ($n = 209$, 58%), Professional or

Collaborator (n = 58, 16%), Clinician or Medical Expert (n = 54, 15%), Communicator (n = 32, 9%), and Other (n = 9, 2%). Figure 1 contains a visual breakdown of respondent answers by health care role.

For further clarification, these were the most common answers in each domain:

- Caring: compassion (n = 86), empathy (n = 51), caring (n = 11)
- Professional or Collaborator: honesty (n = 15), integrity (n = 5), dedication (n = 4), professionalism (n = 4), resilience (n = 4), respect (n = 4)
- Clinician or Medical Expert: competence (n = 16), knowledge (n = 16), expertise (n = 3), skill (n = 3)
- Communicator: listener or listening (n = 7), communication or communicator (n = 6), understanding (n = 2)
- Other: curiosity (n = 2), virtuoso (n = 1), poise (n = 1)

The responses were then analyzed according to health care role (Figure 1), sex (Figure 2), and age (Figure 3). Although detailed results are presented in the figures, the Caring domain remained the most popular answer in all groups. Differences started to emerge when looking at medical students (less likely to choose the Communicator role), men (more likely to choose the Medical Expert role, with a smaller proportion choosing Caring), and age groups (where Communicator became more important as age increased).

Figure 1 breaks down respondent answers by health care role. Medical students were significantly ($p < 0.05$) less likely than other stakeholders to choose Communicator as their most important domain. All other groups tended to prioritize the various domains similarly.

Figure 2 compares answers given by male and female respondents. Men were less likely than women (49% vs. 64%) to choose the Caring domain and more likely (20% vs. 11%) to choose the Clinician or Medical Expert domain—although Caring was the most popular domain for both sexes. However, while noticeable, the difference was not statistically significant ($p = 0.06$).

Figure 3 shows respondent answers according to age. Respondents younger than 25 (most of whom were medical students) were significantly less likely to choose Communicator as their most important domain; older respondents were more likely to prioritize Communicator characteristics. Caring domain answers were most popular in all age cohorts.

DISCUSSION

Our study examined what a cross-section of stakeholders in the health care system felt to be the most important attribute a physician should have. The responses were then allocated to domains for analysis. Consistently across all groups, by health care role, age, or sex, words that denoted

TABLE II Summary of attributes by domain

Attribute	Meaning
Caring	Answers falling into the Caring domain tend to focus on the physician's role as a source of empathy and emotional support for patients and their families. "Compassion" and "kindness" are examples of responses that fall into this domain.
Clinician or medical expert	Answers in the Clinician or Medical Expert domain focus on the physician's role as a provider of competent, up-to-date medical care. "Skill" and "knowledge" are examples of responses falling into this domain.
Communicator	Answers in the Communicator domain refer to the physician's ability to impart and receive information. "Teacher" and "receptiveness" are examples of responses falling into this domain.
Professional or collaborator	Answers in the Professional or Collaborator domain refer to the code of conduct and standards of behaviour expected of physicians and the ability of physicians to function as members of a team. "Honesty," "punctuality," and "collaborative" fall within this domain.
Other	Nine responses did not fit neatly into any of the other four categories and were thus given a separate group. "Wisdom" and "poise" are two responses we chose to place into this category.

TABLE III Summary of respondent characteristics

Stakeholder	Respondents		Age group [*n* (%)[b]]										Gender [*n* (%)[b,c]]			
	(n)	(%)[a]	<25 Years		25–40 Years		41–60 Years		61–80 Years		>80 Years		Male		Female	
Patient	100	27.6	1	1	6	6	16	16	68	68	9	9	47	47	53	53
Caregiver	49	13.5	0	0	4	8	15	31	29	59	1	2	18	37	31	63
Nurse	51	14.1	3	6	26	51	19	37	3	6	0	0	3	6	48	94
Doctor	59	16.3	1	2	28	47	24	41	6	10	0	0	37	63	22	37
Medical student	103	28.5	66	64	37	36	0	0	0	0	0	0	44	43	58	56

[a] Of all respondents.
[b] Of the health care group.
[c] One medical student did not respond to the gender question.

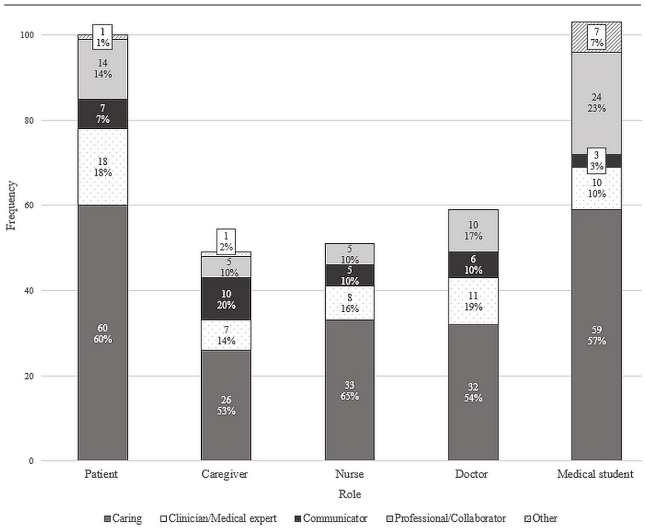

FIGURE 1 Domains chosen by respondents, by health care role.

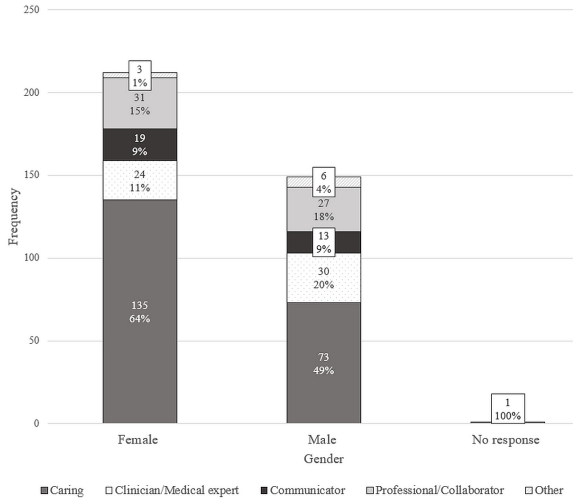

FIGURE 2 Domains chosen by respondents, by sex.

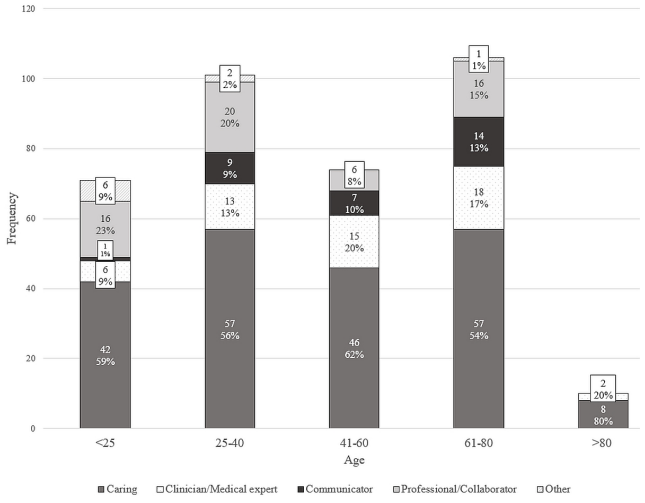

FIGURE 3 Domains chosen by respondents, by age.

Caring were most commonly used. Those attributes, such as compassion, empathy, and kindness, should act as a reminder to clinicians that they work in a caring profession and that the attitude and attribute of Caring is highly valued by all stakeholders. That finding is encouraging because it demonstrates that health care providers and non-providers tend, on average, to be in agreement that characteristics such as empathy and compassion are of paramount importance to a physician's performance. Previous research in the field has also shown that the Caring aspect of the physician's identity is of paramount importance to patients[3].

That being said, our results reveal a number of other interesting observations.

Although answers given by medical students were largely in line with those of other respondents, the students were less likely to prioritize Communication when giving their opinion of the one attribute that physicians ought to have. Medical student eligibility for the survey was restricted to those in years 1 and 2 (who had not begun clinical training) and the difference might therefore relate to the fact that medical students at this stage spend far less time communicating with patients or other health care providers, and thus might be less likely to appreciate the role that effective communication plays in the hospital or clinic environment. That finding therefore reveals an opportunity to address an unmet need in pre-residency medical education, because a physician having communication skills has been shown in numerous studies to be a priority for patients[4]. Although we also report that, compared with every other cohort except the 80 years and older group, respondents less than 25 years of age also tended to choose the Communicator domain significantly less often, that result is really driven by the fact that the 25-or-less cohort was filled primarily with medical students.

Men and women both tended to give answers in the Caring domain most frequently. However, a greater proportion of women than men chose the Caring domain, and a larger proportion of men than women chose the Clinician or Medical Expert domain. That difference trended toward statistical significance ($p = 0.06$), and a larger sample size might determine whether the difference is reflective of a broader philosophical difference between men and women with respect to the emphases they place on physician roles. The reason for the disparity is likely multifactorial and might relate to both conscious and unconscious biases in both sexes, as well as to overarching societal pressures. For example, previous studies have found significant differences in how male and female medical students approach various aspects of medical care[5]. One study in a sample of medical learners and physicians found that male and female participants made certain associations with respect to doctor–patient communication that were at least partly informed by gender stereotypes. Male learners in that study were less likely than female learners to view kindness as an important curative factor in patient communication, and compared with male physicians, female physicians rated "empathy" as more important in patient communication[5]. The causes of those differences likely derive from a complex interplay between the respondent's gender[6] and the cultural milieu that informs the way in which each views the role of emotions in human interactions[7]. Further

research might evaluate whether the extent of the disparity is equally prevalent in societies with markedly different attitudes toward gender roles and relationships.

Our study has some limitations. The initial target sample size of 100 respondents per health care role cohort was reached only for patients and medical students, which limits the generalizability of our findings to a broader population. Similarly, only 10 respondents were more than 80 years of age, which limits the level of confidence with which that cohort can be compared with younger cohorts.

The identification of domains and allocation of responses to the domains was performed by the authors themselves, which could potentially introduce bias into how the data were interpreted. Future studies could address that issue by having a third party derive overarching themes based on respondent answers.

The cross-section of respondents was somewhat restricted, in that most were cancer patients and their caregivers, and all were adults. We did not record whether the patients were hospitalized or had been approached in an outpatient clinic or treatment unit, nor did we ask about the type or stage of their cancer. It is certainly plausible that those factors would affect the answers given for the "most important attribute." If the attitudes that patients and caregivers have toward a physician's most important attribute are assumed to be shaped in part by the disease through which they interact with the health care field, patients having a non-cancer diagnosis might conceivably think differently about the qualities that are paramount in physicians. Similarly, compared with adults, pediatric patients or their parents might have different attitudes about a physician's most important quality—potentially presenting an interesting area for further study.

We also don't know what assumptions respondents might have made before delivering their answer. For example, it is conceivable that many respondents did not answer with a word that would have been allocated to the Clinician or Medical Expert domain because they had already assumed a basic level of competence and knowledge, and then looked for another attribute in addition to that competence. A follow-up study is now being planned, taking the most common answers from each domain in the present study, and asking a new group of respondents to rank their top 3 choices. If our hypothesis is correct, then the top-ranked item might be in the Medical Expert domain, with the Caring domain coming in second place. That hypothesis could be further investigated in focus groups or semi-structured interviews with a subset of respondents to ascertain *why* people make their determinations[8].

CONCLUSIONS

In this study of 362 stakeholders, our results demonstrate that a caring and compassionate attitude is deeply valued regardless of age, sex, or role in the health care system. We further found that, as a primary attribute, communication skills were less highly valued by medical students and the younger cohort of respondents.

Our results should be a reminder to practicing clinicians of the attributes that are valued, and with ongoing work, this type of research can also be taken into medical schools in the development of the next generation of physicians.

CONFLICT OF INTEREST DISCLOSURES

We have read and understood *Current Oncology*'s policy on disclosing conflicts of interests, and we declare the following interests: DB reports a consulting or advisory role for Bristol–Myers Squibb (institutional), Pfizer, and AbbVie, and honoraria from AstraZeneca, Ipsen, Amgen, and Janssen. The remaining authors have no conflicts to disclose.

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