

Processes for Effective Communication in Primary Care

Saul J. Weiner, MD; Beth Barnet, MD; Tina L. Cheng, MD, MPH; Timothy P. Daaleman, DO

Communication in the delivery of health care services occurs along 2 axes: between providers and patients and among several providers. In primary care, a principle objective in the provider-patient relationship is facilitating *whole-person care*, which is care provided in the context of family and community. In addition, primary care emphasizes communication between the primary care physician and other providers with the goal of *integrated care*, or care provided in the context of a patient's overall health care needs. However, considering both the U.S. health care delivery system and medical education programs, several obstacles inter-

ferre with the necessary processes of communication. This paper addresses those obstacles with a conceptual framework for effective communication in primary care. Recommendations propose formalizing requirements for the exchange of information among providers, enhancing communication training, disseminating information technology, and mitigating external factors that disrupt communication in primary care.

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For author affiliations, see end of text.

Health care in the United States can be a fragmented and depersonalized experience. Many patients find themselves in a nomadic environment, often shuttling among physicians who rarely communicate with each other, and have no single provider who is well informed about their overall care (1–3). Not surprisingly, patients, health care providers, and purchasers all express widespread dissatisfaction with a system that, while costly and technologically advanced, performs poorly on many measures of quality (4). In this supplement, Stille and colleagues (5) review the evidence on interventions to coordinate care and reach consensus on the following points: the generalist should be the hub of care; generalists and specialists must collaborate more closely; care should be delivered by teams; patients and their families should be part of those teams; and information technology is critical for tying together the health care system. Not to overstep current evidence, they conclude that further work is needed to identify the elements of coordination that improve health outcomes.

This paper shifts the focus from outcome to process. Our premise is that an effective primary care system must have the capacity to manage unparalleled amounts of information. This information is acquired and shared through a process of communication. Characteristics of providers and of the environment in which they practice are frequently obstacles to the process. In conceptualizing a framework for effective communication in primary care, we reach some of the same conclusions as Stille and colleagues, but our focus on how knowledge about patients passes through the system highlights opportunities to intervene where information is overlooked, distorted, or lost.

One of the aims of primary care, according to the Institute of Medicine, is care provided in the context of family and community: *whole-person care* (6, 7). Whole-person care depends on effective communication between providers and their patients. For example, a physician may recommend postponing elective surgery after learning of a patient's caretaker responsibilities. Or, a physician may tailor an educational intervention on insulin self-administration to a patient's shift-work environment if the patient is employed in a factory. Providing whole-person care de-

pends on *contextual knowledge*, or the knowledge of a patient's responsibilities at work, home, or school; medical history and principal health concerns; and the values and beliefs that are relevant to the patient's care (7, 8). Contextual knowledge is the essential information that providers must acquire from patients and their families to deliver whole-person care.

A second aim of the Institute of Medicine for primary care is *integrated care*, care that coordinates and combines all of the personal health care services a patient needs over an extended period, including the provision of comprehensive, coordinated, and continuous services (6). We propose that integrating care depends on *whole-care knowledge*, which is global knowledge of a patient's care plan. Breakdowns in communicating such knowledge disrupt integration. For example, a primary care physician may recognize that his patient cannot safely self-administer a medication but fail to relay the information to another provider who initiates the medication anyway. Hence, whole-care knowledge is the information that providers must share with each other to deliver integrated care. In a primary care system, the primary care provider, or *integrator*, is generally charged with maintaining whole-care knowledge. The integrator may on occasion be a subspecialist, such as when an infectious disease physician takes over the care of patients with HIV infection.

Providing whole-person care that is integrated by primary care physicians is the distinguishing characteristic of a primary care system (9). Therefore, the communication of both contextual knowledge and whole-care knowledge are essential processes. When health care professionals cannot easily communicate with each other, they sometimes turn to patients for whole-care knowledge. Patients, however, are not trained to provide expert knowledge about their

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care. A medication update, for example, derived indirectly from a patient rather than the prescribing physician, can lead to misinformation rather than whole-care knowledge. Conversely, physicians cannot routinely depend on second-hand information from other providers about patients' immediate circumstances. Patients and their families are the best source of information about their lives. An effective primary care system must keep channels of communication open so that physicians can acquire contextual knowledge from patients and share whole-care knowledge with each other.

OBSTACLES TO COMMUNICATING PATIENT CARE INFORMATION

Many medical recommendations are made without either contextual knowledge or whole-care knowledge of a patient's history. As an example of the former, a physician may prescribe a medication unaware that the patient cannot afford the cost; this represents a failure of information conveyance between clinician and patient. As an example of the latter, a physician may prescribe warfarin as an anticoagulant for a patient with chronic atrial fibrillation, unaware she is scheduled for knee replacement surgery the following week. This represents a failure of conveyance across providers.

Provider–Patient Communication

An extensive body of literature has discussed the challenge of acquiring, processing, and sharing information through the physician–patient relationship. Studies have identified optimal receptive, interpersonal, and affective provider behaviors for therapeutic relationship building, including asking open-ended questions, using verbal encouragement, avoiding interruptions, providing patient education, expressing personal warmth, and eliciting patient concerns (10–14). In addition, several reports link provider interviewing skills and communication behaviors to specific patient outcomes such as greater satisfaction, lower stress, greater medication adherence, better blood pressure control, and success at smoking cessation (15–19).

Much of what has been learned from communications research, however, is not systematically taught to students or practitioners. To address this problem, several models of physician–patient communication based on research evidence have been adopted by almost a third of the nation's medical schools (20–26). Most widely implemented is the SEGUE framework for teaching and assessing communication skills (24). The basic SEGUE framework is a checklist of 25 essential communication tasks grouped into 5 sections: Setting the stage; Eliciting information; Giving information; Understanding the patient's perspective; and Ending the encounter. It provides a structural foundation for instruction and assessment, and its architects emphasize that the focus on tasks provides a "sense of purpose for learning communications skills" (27).

The ultimate purpose of physician–patient communi-

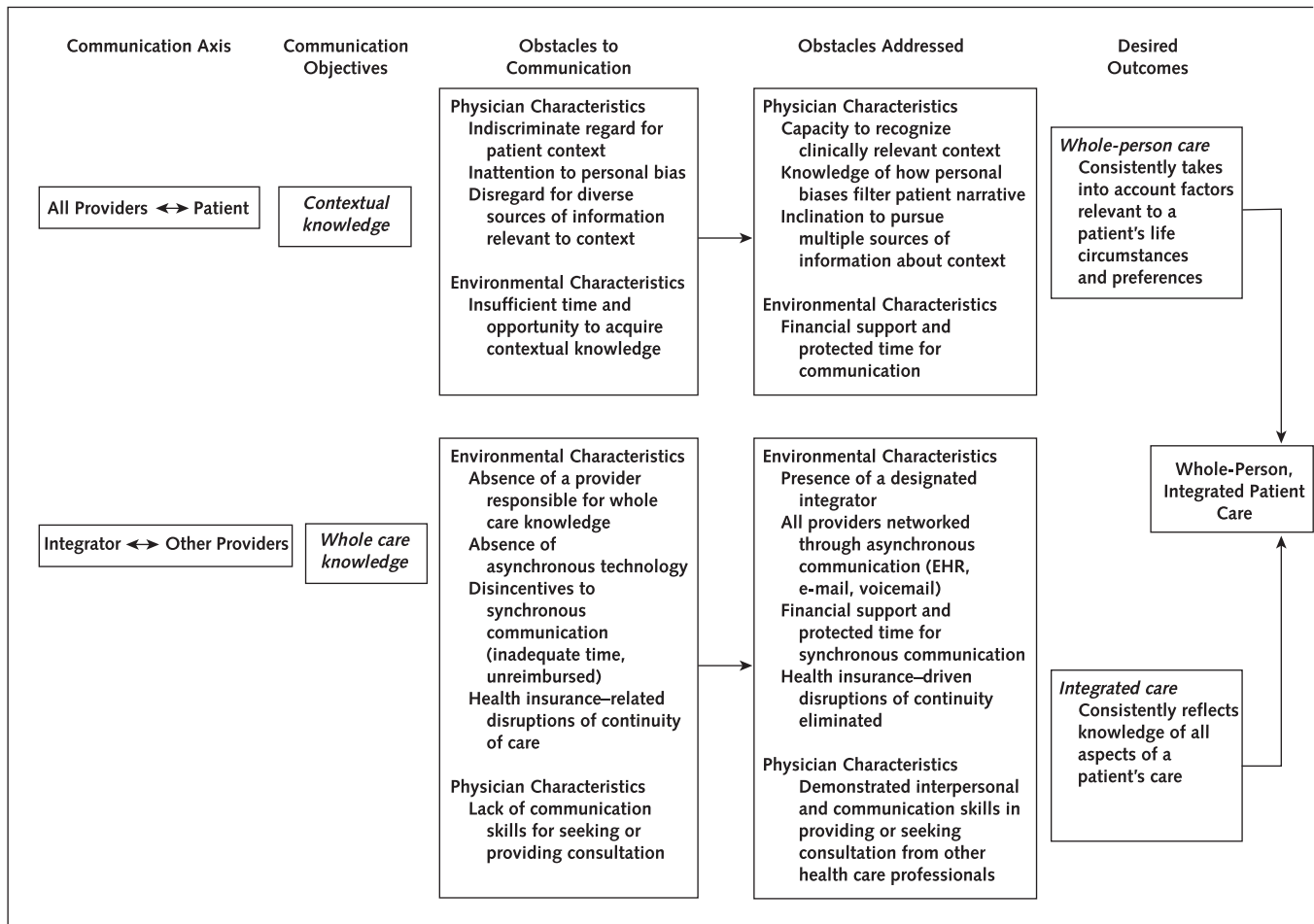
cation is the provision of whole-person care. Accordingly, key communication tasks include the exploration of psychosocial factors, quality of life, and patient perspectives that can affect treatment plans (24). Whole-person care depends on *what* information is elicited, specifically its relevance to care (contextual knowledge). Identifying relevant patient context has been characterized as a qualitative process that requires 3 provider characteristics (**Figure**): 1) the capacity to recognize what is clinically relevant from the infinite complexity of patients' lives; 2) adequate self-knowledge to appreciate how personal biases shape physicians' acquisition, interpretation, and dissemination of information; and 3) readiness to seek contextual information from multiple sources when necessary (8). The absence of any of these could limit or distort the contextual knowledge essential to planning and implementing whole-person care. Environmental obstacles to physician–patient communication are also an issue. These include insufficient time allotted during visits for physician–patient interaction, competing incentives such as pressures to generate revenue, and the limited opportunity for interaction and exchange of information outside of an office-based visit (28, 29).

Provider–Provider Communication

While patient–provider communication is a relational process, communication between providers may be regarded primarily as an information exchange process. As a result, the focus on improving integrated care has targeted structural issues, such as the electronic health record, physician networks, and other environmental factors. When do failures to communicate whole-care knowledge occur? Such failures are likely 1) when an integrator is absent; 2) when there is inadequate technology to facilitate communication; 3) when there are disincentives, such as insufficient time or reimbursement; and 4) when provider networks are disrupted. Communication breakdowns are bidirectional since, as Stille and colleagues note, information from consultants is relayed to primary care physicians 55% to 80% of the time, and generalists communicate with specialists even less often (30, 31).

Information technology holds promise for addressing the challenge of managing whole-care knowledge in a busy and complex clinical environment through asynchronous communication. Ideally, an effective electronic health record would document every medical encounter immediately and thoroughly, and all documents would be accessible to every provider (32, 33). The promise of asynchronous communication has limitations, however (34–38). Providing "effective . . . consultation to other physicians and health care professionals" is regarded as an essential "interpersonal and communication skill" by several major physician accreditation organizations (39). Even in the informatics field, the give-and-take of conversation or other real-time exchange is recognized as essential to establishing what some call "common ground" (shared knowledge) or a

Figure. Conceptual framework for communication with and without the obstacles to whole person, integrated patient care.



*Assumptions: providers are technically well trained, and they support the goals of whole-person, integrated patient care. EHR = electronic health record.

mutual appreciation of differing perspectives (34). Without shared knowledge, clinicians sometimes “talk past each other,” resulting in disagreements about clinical recommendations. In an editorial on interspecialty communication, Marjorie Bowman relates how primary care physicians and specialists “make incorrect presumptions about the other’s motives” (40). As an example, she describes her frustration at what she initially considered diagnostic overkill when an oncologist colleague ordered many tests to verify the extent of disease on a patient with known metastatic breast cancer, only to discover that the tests were needed to track response to therapy. She also recounts an incident in which a dermatologist initiated oral glucocorticoid therapy for a diabetic patient who had a skin lesion without first discussing his decision with her, resulting in loss of diabetic control. In each case a telephone call led to resolution and got care back on track.

Currently, while primary care physicians are expected to function as integrators, care-related information may not reach them. Instead, information not contained in a shared medical record passes inconsistently among provid-

ers, often via the patient, so that no clinician has whole-care knowledge. Such communication breakdowns are due not only to inadequacies in the medical record but also to 2 major disincentives to real-time communication: its interruptive effect on the flow of care and a lack of financial compensation for time and effort invested. “Hamster health care” aptly describes the experience of running all day to keep up with patient volume (41). The structure of the current health care environment has made communicating with colleagues too impractical, time-consuming, and economically unproductive for many clinicians.

RECOMMENDATIONS

The following recommendations seek to promote an environment in which contextual knowledge and whole-care knowledge inform every aspect of patient care. They are directed at both the level of the individual practitioner and at the organizational and system levels of care, with the aim of addressing the obstacles outlined in the Figure.

1. Promote medical communication skills training and

the clinician characteristics essential to providing whole-person care.

Rationale: Currently, only a minority of medical students and physicians receive formal communication training using curricula that are proven to contribute to better patient outcomes. Communication skills should be taught widely by faculty with expert knowledge using standardized patients for uniform assessment and feedback (26, 42–44). In addition, medical education must cultivate the cognitive, integrative abilities, and self-awareness essential to acquiring contextual knowledge. Preparing medical learners to provide whole-person care is a frontier for many educators. For example, how does one promote introspection, the curiosity to explore context, or the capacity to uncover and understand complex social systems in a clinical setting? Recent interest in narrative medicine (45), teaching personal awareness (46), the “hidden curriculum” shaping professional values and attitudes (47, 48), the application of qualitative inquiry to the physician–patient encounter (8), and the concept of clinical expertise in medical decision making (49, 50) point to potential avenues for educational development. All acknowledge the profound influence of environment and individual perspective on the skills and attitudes that clinicians bring to their professional lives.

Exercises that involve standardized patients can effectively assess physician performance at acquiring contextual knowledge when cases are scripted with embedded contextual information essential to care. An examinee, for instance, may be challenged to recognize that the onset of poor diabetic control in a particular patient was precipitated not by progression of her disease but by disrupted self-care after she assumed caretaker responsibility for an elderly parent with dementia. Certification examinations by the National Board of Medical Examiners (51), the Accreditation Council of Graduate Medical Education, and the American Board of Medical Specialties (39) could all provide opportunities to assess clinicians’ abilities to elicit and use contextual knowledge.

2. *Institutionalize the role of the primary care physician as a participant in all major medical decisions.*

Rationale: Primary care physicians who are continuously engaged in all major medical decisions remain current about their patients’ clinical situations and bring their whole-care knowledge to the decision-making process. Such engagement could be fostered by reorganizing the process of care as follows:

Offer every patient a primary care physician or other integrator who will have input on every major decision about their care. All other providers should consult the integrator before any significant, nonemergency, or nondiagnostic medical intervention that was not specifically requested by the integrator. They would not be obliged to follow the integrator’s recommendations, only to solicit them, and document the basis for any decision not to follow them. The arrangement could be operationalized by bundling

specific communication requirements (such as a telephone contact or e-mail) into Current Procedural Terminology codes. If the provider could not show evidence of having communicated with the integrator, the procedure would be considered incomplete and, therefore, not reimbursable.

Such a model would place the primary care physician at the center of a wheel of care providers, creating the essential repository of whole-care knowledge. No patient would be started on high-dose steroids, for instance, without prior consultation with their integrator. This would avert incidents of the kind described by Bowman, such as a sudden loss of diabetic control.

Require third-party payers to reimburse physicians who assume the integrator role for the costs incurred and make all integrators accountable for fulfilling specific responsibilities. Physicians who perform an integrator function should demonstrate a high level of engagement and proficiency in planning and coordinating the care of patients among multiple providers. Currently no reimbursement system specifically pays primary care physicians for communicating with other providers, although other professions (such as the legal profession) have reimbursement schemes for the time and resources expended in information sharing (52).

3. *Optimize technology for asynchronous communication.*

Rationale: Communication is disrupted when medical information is inaccessible to providers or when providers cannot send each other messages easily. While real-time communication is necessary in some situations, the bulk of patient information exchange probably can occur asynchronously. A goal should be the establishment of a universally accessible medical record, with adequate security features to protect privacy.

4. *Preserve the integrity of the networks and patient–provider relationships that are essential to integrated, whole-person care.*

Rationale: Both whole-care and contextual knowledge are lost when the payment and financing system or a lack of insurance force patients to change providers (53). Any reimbursement system must protect the physician–patient relationship.

CONCLUSION

Inadequate communication with patients and among providers is a major impediment to achieving whole-person, integrated patient care. Addressing the problem will require training clinicians to seek and apply contextual knowledge in every medical encounter, developing the infrastructure for a central provider to acquire and share whole-care knowledge with other providers, and eliminating the external forces that disrupt physician–patient and interprovider relationships. Achieving these objectives will require educational interventions, regulations that set standards for timely information sharing, and a reimbursement structure that compensates providers for their efforts toward communicating health care information.

From the University of Illinois at Chicago and the Veterans Affairs Midwest Center for Health Services and Policy Research, Chicago, Illinois; University of Maryland School of Medicine and Johns Hopkins University, Baltimore, Maryland; and University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

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Requests for Single Reprints: Saul J. Weiner, MD, University of Illinois at Chicago, 840 South Wood Street, M/C 718, Chicago, IL 60612; e-mail, sweiner@uic.edu.

Current author addresses are available at www.annals.org.

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Current Author Addresses: Dr. Weiner: Departments of Medicine and Pediatrics, University of Illinois at Chicago, 840 South Wood Street, M/C 718, Chicago, IL 60612, and The Midwest Center for Health Services and Policy Research, Jesse Brown Veterans Affairs Medical Center, R&D (MC 151), 820 South Damen Avenue, Chicago, IL 60612.
Dr. Barnet: Department of Family Medicine, University of Maryland School of Medicine, 29 South Paca Street LL, Baltimore, MD 21201.
Dr. Cheng: General Pediatrics & Adolescent Medicine, Johns Hopkins University, 600 North Wolfe Street, Park 392, Baltimore, MD 21287.
Dr. Daaleman: Department of Family Medicine, University of North Carolina at Chapel Hill, CB #7595, Manning Drive, Chapel Hill, NC 27599-7595.