In its report Crossing the Quality Chasm, a New Health System for the 21st Century, the Institute of Medicine defined 6 aims for improvement in health care. Health care should be safe, effective, patient centered, timely, efficient, and equitable.

This report was published earlier in this decade. However, nothing since that time frame has altered the importance of these 6 objectives. Health care delivery that works to develop and refine these 6 areas is likely to advance our ability to meet patient needs with better outcomes.

Tackling all 6 objectives simultaneously can be a challenge, but if we keep the patient at the center of the health care concepts, it potentially is achievable. To do so, we have to understand the patient; his or her level of understanding of health, disease, and care; and the cultural context of those values. We also have to understand how to deliver optimal care across these layers of understanding in a way that is effective and certainly safe. By understanding those layers of understanding, we can begin to positively apply the rest of those principles to improve health care. This entails engaging and using the concept of health literacy as a patient-centered tool. As Shortell and Swartzberg recently noted in their report, The Physician as Public Health Professional in the 21st Century, physicians need to consider individual patients within the larger social, economic, and cultural contexts. Moreover, these investigators emphasized that cultural competence and facility with language will be skills absolutely necessary for successful physicians to fulfill their role, especially when interacting with patients of varied ethnicities and from different cultures.

In this issue of the American Journal of Kidney Diseases, Devraj and Gordon have written a call to action to advance health literacy as an avenue of chronic kidney disease (CKD) research. They outlined fundamental aspects of health literacy research and simultaneously highlighted the paucity of this work in patients with CKD. As a specialty and research community, we should take this call to action seriously, if only because it is likely to help us better address the 6 principles noted and improve our health care delivery. However, there are other reasons that this approach is meritorious.

First, this approach represents multiple forms of patient-oriented research. Research advances our knowledge of how to do things better. Patient-oriented research also has the obvious possible benefit of direct application to clinical care delivery. Aspects of health literacy research also readily fit into type 2 translational research. Patient-oriented research can adopt many approaches; traditional clinical trials, research using such patient materials as blood cells (classic type 1 translational research), outcomes research, or research that examines how findings are translated from those very studies into daily practice and decision making. There also is research that focuses on the practice of medicine and its structure and functionality per se.

Promoting health literacy research in patients with CKD thus establishes a new sphere for translational research in nephrology, research that is truly patient oriented, but also that directly intersects with practice and may have an effect on outcomes.

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Health literacy research in patients with CKD thus establishes a new sphere for translational research in nephrology, research that is truly patient oriented, but also that directly intersects with practice and may have an effect on outcomes.

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gies that enable caregivers to cross the efficacy-effectiveness gap of interventions. It also has the potential to give us a better perspective on economic considerations related to CKD and patients and intuitively deliver some form of social benefit as a result of this avenue of investigation. Thus, health literacy research in patients with CKD is a novel area of activity as a foundation for population-based outcome studies, as proposed by Booth and Mackillop.6

Interestingly, Devraj and Gordon3 provide a possible template for investigation, but many reagents and vectors for health literacy research in patients with CKD already exist. There are commonly used health literacy tools, such as Rapid Estimate Adult Literacy in Medicine7,8 and the short form of the Test of Functional Health Literacy in Adults,9,10 as well as the Demographic Assessment for Health Literacy.11 Moreover, a large number of materials is available for the translation step from assessment of understanding to delivering knowledge. These tools can be used for interventional studies. These materials include web-based curriculum, eg, Kidney School (Life Options Rehabilitation Institute, a program of Medical Education Institute, Inc, Madison, WI), and combination media (web-based, print, and other media) materials, such as the National Kidney Foundation’s Kidney Learning Systems. Many Kidney Learning Systems materials are also available in Spanish to facilitate even broader use. Therefore, these educational materials do not need to be redeveloped. There is already a solid portfolio of tools for assessment and intervention studies. Certainly, this tool kit may need to be refined, but the tools are already there to move ahead.

Any emphasis on gaining better understanding of our patients should be viewed very positively. However, there are many questions that surround health literacy research in CKD that cannot be ignored. Some of the larger questions are:

1. Which research population to pursue for this form of research? Should investigators link up with such programs as the National Kidney Foundation’s Kidney Early Evaluation Program (KEEP) to identify individuals at risk of CKD? This has a significant potential for societal benefit in understanding CKD and health literacy with a large cohort of individuals. An alternative approach would be to use the federal mandate through the Medicare Improvements for Patients and Providers Act of 200812 as an opportunity for more focused first steps in investigation. This approach has less potential societal benefit, but a greater likelihood of learning the process of this form of research.

2. Who will fund such research? As noted, health literacy research is situated at an intersection of various types of research. Classically, the Agency for Healthcare Research and Quality has had the federal mandate for the translation of research results into practice. However, the discov-
mary of some aspects of practice, e.g., health literacy, might not necessarily fall under their direct purview. The National Institutes of Health has funded research projects that examine health literacy through traditional R01 and other R award mechanisms. However, with a tighter economic climate, it may be necessary to look for new areas of support. Other organizations, such as the Robert Wood Johnson Foundation and the Commonwealth Fund, are potential sources of funding given their interest in improving the practice of medicine. However, other less traditional sources of funding also deserve consideration. Agencies and associations, such as the Ad Council and American Association of Retired Persons, have logical links and vested interest in health literacy research. Even such an agency as the Department of Homeland Security has a connection when one considers the health of new immigrants in the United States. Thus, although funding may not be obvious, ingenuity and creativity, if exercised well, could open up new options for sustaining investigation in CKD-related health literacy research.

3. How should investigators construct the research in a way that moves beyond association and moves toward causation and effect? Or do we look at this form of research in nephrology as a surrogate for marketing research, a viable, but certainly nontraditional, mode of investigation in biomedicine?

4. How do investigators account for changes in working memory in a disease process characterized by cognitive decline?

5. How should investigators best integrate blended learning approaches and simultaneously cross language barriers or other obstacles without confounding their work?

These questions are natural outgrowths of pursuing a new form of investigation and thinking about its application to CKD. Devraj and Gordon should be commended for their accomplishments and their stance that we should focus on health literacy. In supporting their approach, it is very likely that we will add to our scientific literature, expand our ways of caring for patients, and, most important, move toward realizing the 6 aims of optimal health care as laid out by the Institute of Medicine. How we get there remains to be seen.

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REFERENCES