Although social and behavioral factors influence health and mortality, such determinants are often ignored in clinical practice. A few, such as smoking and alcohol use, are commonly assessed by primary care physicians, but many others may be viewed as outside the scope of medical practice. Calls for clinicians to attend to these factors are increasing, and several developments are accelerating the medical community’s interest in addressing them. We hope that a new set of standard measures for social and behavioral determinants of health, delineated by an Institute of Medicine (IOM) committee that we cochaired, will catalyze action on this front.1

Reimbursement policies that reward population health management and value-based purchasing are encouraging attention to modifiable determinants of health. Penalties for hospital readmissions and the move toward accountable care organizations are fostering attempts to address elements of patients’ lives and behavior that influence the risk of disease and the effectiveness of medical treatment.

A growing body of research links social and behavioral factors including low income, low levels of education, lack of exercise, and stress to the onset and progression of diseases ranging from arthritis and asthma to diabetes and cardiovascular disease, as well as to overall mortality. Various studies have shown that the effects of social and behavioral risk factors such as smoking and social isolation rival and sometimes exceed those of genetic factors and clinical indicators such as blood pressure.3

Meanwhile, incentives for adopt-
tion and “meaningful use” of electronic health records (EHRs) have expanded their use, and more than 70% of office-based U.S. physicians report using an EHR system. Such systems could allow users to obtain and store digitized information on standard measures of social and behavioral determinants and make it accessible to clinicians, patients, health systems, and researchers. However, potential unintended negative consequences (e.g., use of the information by insurers to increase a patient’s premium or by health systems to avoid high-risk patients) necessitate special attention to privacy, security, and access.

Although conditions favor greater integration of such information into clinical practice, the absence of an efficient, systematic method for capturing this information has hindered progress. Clinicians have been on their own in identifying key determinants and developing ways of assessing them — for instance, by prompting patients to deepen the narrative of their social history to provide context and offer insight into their life circumstances. The use of standard measures offers the opportunity to efficiently identify conditions that may modify diagnoses and treatment plans and renders the information usable by various systems for various purposes.

In recognizing the opportunities for improving patients’ care by addressing the social and behavioral determinants of their health, nine federal and foundation sponsors asked the IOM to convene a committee of social scientists, clinicians, and informatics experts to recommend ways of incorporating measures of these determinants into EHRs and ways of overcoming barriers to doing so. The committee reviewed the literature on social and behavioral determinants of health to identify the factors most strongly associated with health and assessed the availability and use of brief, standardized measures of those determinants.

Placing priority on standard measures with the greatest clinical usefulness and feasibility for capture in the clinical workflow, the committee developed a concise panel of measures (see table). Each measure consists of one or more questions drawn from scientifically validated instruments. For example, two questions from the Patient Health Questionnaire provide a validated screen for major depression. The proposed measure set contains standardized questions for four domains that are already widely assessed in clinical practice and for eight additional domains.

The questions can be asked by clinical staff or directly answered by patients on an electronic or paper questionnaire, and the information can be incorporated into the EHR. Incorporating it into the EHR can improve patient care, outcomes, and population health in several ways. First, it can permit greater precision in diagnoses and improve treatment. For example, reliance on the Framingham risk score leads to underdiagnosis of cardiovascular disease in populations of low socioeconomic status (SES); incorporating information on patients’ SES reduces this bias and can lead to better preventive treatment for people at risk.

Second, this approach can facilitate more effective shared decision making. With more accurate information on a patient’s situation, such as his or her financial strain, clinicians can better partner with the patient to make informed and realistic medication choices.

Third, the measures can help clinicians to identify risk factors such as depression and tobacco use (which are included in the Adult Recommended Clinical Quality Core Measures of the Centers for Medicare and Medicaid Services). They can be addressed directly in order to reduce patients’ risk of disease and improve care and the likelihood and speed of recovery. Better identification and treatment of patients with depression, for example, can enhance management of chronic conditions such as diabetes and accelerate recovery from treatments such as coronary bypass surgery.

Fourth, the information can prompt the clinical team to refer a patient to a public health department or a community agency that helps to address problems such as financial strain or intimate-partner violence. With the patient’s consent, the EHR can also support communication between clinicians and service providers so that follow-up from the referral can inform the patient’s treatment plan going forward.

Fifth, information on social and behavioral factors can expand health systems’ capacity to tailor services to their population's needs. For example, using information on these determinants along with clinical data, they can better match high-risk patients with various types of care-management programs, or they can initiate new services such as group visits or support groups if they identify social iso-
lation as a common problem in their patient population.

Sixth, use of these measures can broaden the patient context available to researchers from EHRs, which would store standard measures of social conditions and behavioral risk alongside conventional clinical, laboratory, and imaging data. EHRs are increasingly being used for research, including efforts to link genetic data with phenotypes extracted from EHRs to pragmatic clinical trials, patient-centered outcomes research, and more efficient postmarketing surveillance of drugs' side effects. Such efforts will be
improved by access to standardized information about patients’ social conditions and behavioral risk.

Obtaining information on social and behavioral determinants requires additional time and attention. However, since these factors can be self-reported and some of them need only be assessed at initial intake, collecting this information should have minimal effect on clinicians’ workflow. Greater challenges arise in using the resulting information.

Addressing social and behavioral determinants may require reconsideration of clinical roles and workflows. Who should discuss sensitive issues with the patient? What interventions are feasible? As such decisions are made, clinical team members will need additional education and training in relevant processes and interventions.

Any new diagnostic technology or mode of therapy creates added demands and necessitates changes in practice. We believe that the benefits of adopting and using the measurement panel will outweigh these costs. Limiting the panel to 12 brief, standardized screening measures reduces barriers to implementation, and widespread adoption of the panel will increase interoperability, ease barriers to information exchange, and reduce the need for redundant capture. Health gains and lower service utilization resulting from assessment and addressing of these determinants should at least partially offset the costs of intervention.

Including a concise panel of standard measures of social and behavioral determinants in every patient’s EHR will increase clinical awareness of the patient’s health status and enable clinical, public health, and community resources to work in concert. We hope that the existence of newly aligned incentives and a readily adopted standard set of measures will motivate EHR vendors to incorporate the IOM-recommended measure panel into their products, health systems to adopt its use, and clinicians to incorporate the newly available information into their care of patients.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

Drs. Adler and Stead cochaired the IOM Committee on Recommended Social and Behavioral Domains and Measures for Electronic Health Records; the other members of the committee were Kirsten Bibbins-Domingo, Patricia F. Brennan, Ana V. Diez-Roux, Christopher B. Forrest, James S. House, George Hripcsak, Mitchell H. Katz, Eric B. Larson, Karen A. Matthews, David A. Ross, and David R. Williams, aided by IOM fellow Deidra Crews.

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