of the patient–physician relationship, the more optimistic the estimate.[5] Clinicians may also have trouble with prognostic uncertainty. Some react with an unwillingness to talk to the patient about the future at all (but commonly express this unwillingness in terms such as "we have to wait and see" or "no one can tell"). Others, ignoring the uncertainty inherent in prognostication, do more and more tests in the futile hope of improving their prediction. We believe that physicians need to recognize their reaction to uncertainty and how these reactions may influence their conversations with patients.

In many respects, the primary communication task of clinicians is the management of uncertainty, and perhaps nowhere is this clearer than in communication about prognosis. By normalizing uncertainty and attending to the affective response to living in the face of an uncertain future, we may help our patients and their families enjoy the time they have now.

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

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eReferral — A New Model for Integrated Care

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Health care reform has generated new pressures for the U.S. health care system to take better care of more patients at lower cost. Whereas these challenges are relatively new in the fee-for-service private sector, safety-net systems have perennially had to "do more with less"; innovations in this arena have generally been prompted by clinical exigencies rather than the need to gain market share or maximize revenues.[1] We believe that one such innovation — eReferral — can serve as a new model for integrating primary and specialty care.

In 2005, San Francisco General Hospital (SFGH) was grappling with a challenge familiar to safety-net organizations: providing access to specialty care.[2] Because of a tremendous mismatch between supply and demand for specialty services, patients were waiting 11 months for a routine clinic appointment for gastroenterology, 10 months for nephrology, and 7 months for endocrinology. If a patient needed to be seen sooner, the referring clinician had to plead with a specialist to overschedule into already overflowing clinics. Patients would sometimes wait for months only to discover that they were in the wrong subspecialty clinic or needed further diagnostic testing, which added to delays in care.

The dual imperatives of timely access and rational triage drove the creation, implementation, and spread of our homegrown, Web-based, integrated specialty referral and consultation system, called eReferral. It uses health information technology to link primary care providers (PCPs) and specialists, with the goals of increasing access to care, improving dialogue, optimizing the efficient use of specialty resources, and enhancing primary care capacity.

Originally piloted for gastroenterology services, eReferral is now used for more than 40 services at SFGH. PCPs initiate new specialty referral requests through eReferral. The electronic form is automatically populated with relevant information about the patient and the PCP, and the reason for consultation is entered as free text, along with relevant history and exam findings.

Every service has a designated specialist provider who reviews and responds to each referral. The specialist reviewer uses the system
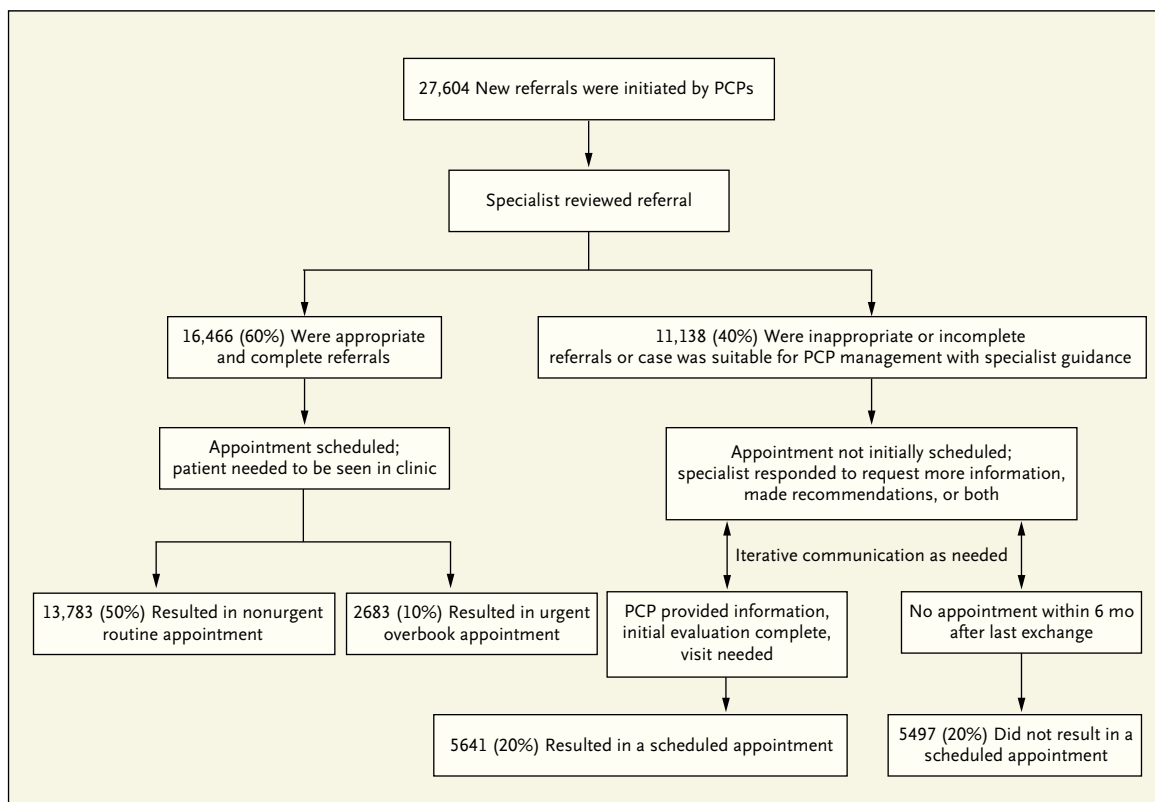
Workflow and Volume of eReferral, July 1, 2011, through June 30, 2012.

The flow chart shows the fate of all electronic referrals during a 1-year period. If there was no appointment scheduled within 6 months after the last exchange between the referring provider and the specialist reviewer, the referral was considered as not resulting in a scheduled appointment. The absence of a scheduled appointment after a referral represents successful comanagement between primary care provider (PCP) and specialist, resolution of the issue, or no further follow-up with the patient.

to schedule a routine or expedited clinic visit, ask for clarification or additional information, recommend additional evaluation before scheduling a clinic visit, or provide education and management strategies without a visit (see diagram). eReferral allows for iterative communication between the PCP and the specialist reviewer, with all exchanges captured in real time in the patient's electronic health record. If the patient is scheduled for an appointment, the electronic referral form — including the dialogue between PCP and specialist reviewer — is available to specialists seeing the patient in clinic.

Our PCPs and specialist reviewers quickly recognized that the system provided expeditious access to specialist expertise, with or without a visit. PCPs now use eReferral to request advice and guidance for patients who may not need a specialty clinic visit, and the system is used for virtual comanagement of certain conditions (e.g., management of subclinical hypothyroidism and evaluation of anemia). When needed, the system allows for a seamless transition to formal consultation.

This evolution of focus — from access to specialty visits to access to specialty expertise — has had several benefits. First,

virtual comanagement of care for some patients reduces the demand for clinic visits, which results in shorter waiting times for patients requiring a visit. In the first nine medical clinics to adopt eReferral, the average waiting time for an initial consultative visit dropped from 112±74 days to 49±27 days (P=0.02) within 1 year. Moreover, previsit guidance provided through eReferral makes scheduled visits more effective by ensuring that there is both a clear reason for referral and a complete preconsultative evaluation. According to a pre- and post-adoption survey of clinic specialists, the percentage of referrals made with-

out a clear consultative question dropped by 44% and 75% in the medical and surgical specialty clinics, respectively.[3]

Second, eReferral formalizes the "curbside consult" in a manner that addresses certain limitations, such as incomplete data and lack of documentation of the interaction, while preserving advantages such as rapid response, case-based education, building of relationships between PCPs and specialists, identification of cases that require formal consultation, and the patient convenience and cost savings associated with avoiding a visit. The asynchronous nature of the dialogue allows PCPs and specialist reviewers greater flexibility than traditional phone calls, pages, or hallway conversations.

Third, the system avoids the contentious issue of whether a particular referral is appropriate. Instead, we focus our efforts on ensuring that the patient receives needed care in a timely fashion. At a delivery-system level, we have used eReferral to systematically identify knowledge gaps in order to provide targeted education on conditions for which patients are commonly referred to specialists but that can be managed in primary care.

Overall, we believe that the eReferral model has the potential to transform the primary–specialty care interface by enabling a move away from a narrow reliance on visit-based care. It reinforces the patient-centered medical home by supporting PCPs in providing longitudinal care for a broader range of conditions and reducing fragmentation of care without placing PCPs in the difficult position of "gatekeeper." It has also

enhanced teamwork and collegiality between PCPs and specialist reviewers.[4]

However, eReferral depends on an entirely new role: the specialist reviewer. In our system, university faculty specialists are provided salary support for reviewing cases, with no financial

partnership with the University of Connecticut. L.A. Care, a large, not-for-profit Medicaid health plan in Los Angeles County, has supported the development of an eReferral-like program that is capable of managing preauthorization requests. California's Medicaid waiver includes a provision

> *The rate of outpatient specialist referrals has nearly doubled over the past decade. Increased utilization, along with documented variation in referral rates, has raised concerns about worsening fragmentation of care and the appropriateness of referrals.*

incentive for promoting or discouraging the use of clinic visits. Although there is wide variation across services, on average, specialist reviewers spend approximately 8 minutes per eReferral. The majority of clinics have one or two dedicated reviewers, to help ensure that referring providers' experience with each clinical service is consistent. Highly rated reviewers are collegial and informative, and they conceptualize their role as providing support and case-based education to PCPs. The role of the eReferral reviewer has been deemed by our hospital risk-management department to be within specialists' usual scope of practice.

Because of their pervasive problems with access to specialty care, safety-net organizations have been early adopters of such referral-and-consultation systems. Community Health Center, a large network of community clinics in Connecticut, is implementing an eReferral system in

encouraging the state's public hospitals to develop similar systems to support HIV care.

Outside of safety-net settings, the spread of accountable care organizations and movement away from strict fee-for-service reimbursement have led to increased efforts to improve coordination and comanagement between primary care and specialty services. Reflecting this interest, medical centers such as UCSF Medical Center, UCLA Health System, and Brigham and Women's Hospital in Boston are implementing systems based on eReferral.

Although the impetus for eReferral originated in the safety net, its usefulness is broadly generalizable. The rate of outpatient specialist referrals has nearly doubled over the past decade, with specialty visits now accounting for more than half of all ambulatory physician visits in the United States.[5] Increased utilization, along with documented variation in referral rates, has

raised concerns about worsening fragmentation of care as well as the appropriateness of referrals. New models of care are needed.

Given the spread of payment reform and federal investments in speeding the uptake of health information technology, adoption of an eReferral model will be increasingly feasible. This type of system holds the potential for addressing care-coordination challenges, boosting the effectiveness of in-person specialty visits, and producing cost savings by reducing the number of specialty visits for conditions that can be managed by PCPs. eReferral, if widely adopted, could help in achieving the elusive "triple aim" — better care for individuals, better health for populations, and lower costs.

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