At the Care Management Institute (CMI), our guiding philosophy is to make the right thing easier to do, and the implementation of KP HealthConnect expands dramatically the possibilities for us to make this philosophy a reality. With the advent of KP HealthConnect, we have at our disposal new tools to answer our perennial question: How can we most effectively support clinicians and members in having the best possible information they need, when they need it? Assembling and clearly presenting the right clinical information and knowledge—what’s known as well as what isn’t—is the core of evidence-based medicine (EBM). CMI has been able to benefit from and complement decade-old efforts within the KP Regions to rigorously engage in developing and disseminating EBM. Our multiple and evolving efforts seek always to improve health outcomes through the identification, implementation, and evaluation of nationally consistent, evidence-based, population-oriented, cost-effective health care programs. To the extent that we bring the right information to the right people at the right point in a clinical encounter, clinicians and members can be optimally prepared to make key decisions.

Knowledge Management

The process of knowledge management is vital to providing content for KP HealthConnect, and the input and experiences of practicing clinicians in the KP Regions are foundational at every step. Knowledge management assembles existing knowledge in medicine and identifies concerns and inquiries that are critical to clinicians. We investigate the degree to which evidence exists to answer these pivotal clinical questions and identify key elements of evidence that should be available during practice.

Once knowledge has been assembled and distilled into core elements, it must be “triaged” into an appropriate level of decision support. What point in the clinical encounter is the right one at which to present the evidence? Is it appropriate to “intrude” in the visit with alerts, reminders, and redirection of care? What information needs to be just “a click away”?

The answers are evolving out of an increasingly clear understanding of the process of clinical decision-making. Clinical decision-making involves understanding the evidence and interpreting its implications depending on individual circumstances as well as on the preferences and values of the involved parties. When rigorous evidence is readily available at the right time and in the right way, clinicians are liberated to address preferences and values—theirs and those of members—in clinical encounters.

With the homework of discovering and distilling the evidence addressed before the clinician even begins work with a patient, visits can be increasingly devoted to the unique aspects of individual situations. For this reason, EBM is a key enabler of the ultimate goal of patient-centered care.

Visit Workflow

Workflow—how exams and discussions proceed—is of central importance to both clinicians and members. The unique relationship that goes on behind the closed door of an exam room must always be respected. KP HealthConnect offers a system with a range of ways to provide evidence and support decision-making within the clinical encounter.

Some clinical issues are important enough to justify interrupting workflow in order to present pertinent information. For instance, missed screening tests and medication incompatibilities are generally worth interrupting the flow of a visit to prompt clinicians and members to do something differently. Alerts and reminders represent the first order of intrusiveness. Instances like these, in which the evidence is strongest and the risks of overlooking it are highest, are relatively rare.

The second order of intrusiveness makes information available the instant a question is posed within the visit workflow. For instance, one medication may be more cost-effective or appropriate than another initially selected. Redirection can be provided with the option to preserve the original order. References are provided on demand, supporting the clinician's need for more
details about options and choices. In KP HealthConnect, an alternative medication functionality provides this type of information and facilitates redirection if the clinician agrees this is best for the patient.

The third order of intrusiveness provides facilitated access to decision supports such as clinical guidelines and other references. One example is treating acid peptic disease caused by *H pylori*, which requires a mixture of antibiotics that changes frequently and is difficult to remember. KP HealthConnect can leverage what several KP Regions have previously achieved through protocols and clinician agreement to field and help fill a pharmacy order for treating *H pylori* that brings all currently recommended medications up for approval. Additionally, a clinician may have started to order a diagnostic test and have a question about it. Within the order form, s/he can find links out to general reference information on the Web through the Clinical Library.

Alerts and reminders, redirection and reference on demand, and general reference availability support the whole range of clinical inquiry, and the flexibility of the KP HealthConnect system allows us to triage evidence into the appropriate level of decision support. Most important, the leverage of knowledge, including the degree of intrusiveness for knowledge within the encounter—like the actual guidelines themselves—is under the guidance and oversight of practicing KP clinicians.

**Quality Assurance Process**

Completing the knowledge management cycle is the need for a consistent quality assurance process in which we ask the question: Does the information that appears in KP HealthConnect accurately represent the evidence on which it is based? The ability to make something easier carries with it the accountability to insure that facilitated care is indeed the right care.

**Involving the Member**

An integrated knowledge management process needs to also take into account the fact that members must have a view into existing knowledge. This is key for self-care of some acute illnesses, such as uncomplicated respiratory infections; support for members in sharing in decisions about their care; and support and engagement of members in their own self-management of chronic medical conditions such as diabetes, heart failure, and asthma. Patient information concordant with that available to clinicians is being made readily available to members. The member functionality (referred to as “MyChart” by Epic) creates a new forum for communicating medical knowledge with our members and empowering them to determine their own health status.

**Final Comments**

Finally, although our efforts to date have focused on putting the right thing into KP HealthConnect to support care for our members, as we look toward the future, we can anticipate harvesting an expanded and extended knowledge base about our members and their clinical experience from KP HealthConnect. Despite the best efforts of CMI, regional experts, and trusted third-party sources, gaps in the evidence base persist and will continue to do so for the foreseeable future. KP HealthConnect will generate an unprecedented data stream reflecting the clinical paths of millions of people. It is incumbent on all of us to use it optimally for research purposes to address these gaps.

It is, in short, the right thing to do.