• In the U.S. and worldwide, patients with similar health problems often undergo very different courses of treatment. Sometimes this is due to gaps in physician knowledge about which medical interventions are most effective, based on research evidence.

• Public and private payers are moving toward paying physicians based on quality—rather than quantity—of care, and the need for clear evidence regarding clinical effectiveness has become even more pronounced.

• Kaiser Permanente has been a pioneer in evidence-based medicine for decades. In the early 1990s, we moved to reengineer our processes for developing clinical practice guidelines based on research evidence.

• Kaiser Permanente’s guideline development and evidence services capacity has grown increasingly sophisticated. Our National Guidelines Program applies rigorous process and evidentiary standards to develop a core set of guidelines. We share our expertise with organizations around the world and have helped to advance the science of guideline development.

**Policy Context**

In most of the U.S. health care system, providers are reimbursed on a fee-for-service basis that rewards the provision of care, regardless of clinical appropriateness or patient need. Recent policy discussions have focused on moving to a system that links payments to quality of care. Such a transition in payment method requires consensus on what constitutes effective, high-quality care. Clinical practice guidelines synthesize existing research evidence regarding medical effectiveness and provide a basis for clinical performance measurement.

**The Challenge**

Over the past fifty years, the base of medical knowledge has expanded enormously, and diagnostic and treatment alternatives have proliferated. The volume of research studies evaluating the effectiveness of these alternatives has also grown substantially. In fact, the evidence base for clinical effectiveness has become so vast that it is essentially impossible for an individual clinician to keep up with it.¹

Numerous organizations produce evidence syntheses to aid in evaluating the effectiveness of therapeutic, diagnostic, and other medical interventions. These groups systematically review studies pertaining to specific clinical topics, critically evaluate the quality of these studies, and synthesize the findings. Clinical guidelines and treatment recommendations are established by medical specialty societies, health care organizations, government entities, and others. Sometimes these guidelines are based on the evidence contained in systematic reviews, other times they are based primarily on the opinion of experts.

Another challenge for guideline development is that most studies—and therefore most evidence syntheses—concentrate on a single condition, while most patients have more than one condition. It is difficult to mesh clinical recommendations from multiple guidelines.

**Kaiser Permanente Solution**

Until the early 1990s, Kaiser Permanente—like other health care organizations—developed guidelines based largely on expert consensus and review of a small number of selected studies. At that time, we began to develop a more rigorous review process that included systematic review of all available evidence, as exemplified by the work our Southern California region undertook with David Eddy, MD, PhD, a noted expert in evidence-based medicine.²

In 2005, Kaiser Permanente built that early work into the National Guidelines Program, supported and directed by our eight regions and medical groups. This
program has facilitated agreement about a core set of guidelines and has raised evidence standards and care quality across the organization.

In 2011, we responded to the Institute of Medicine recommendations on guideline development standards. We adopted a series of internationally-accepted standards for evidence review, including AMSTAR for appraising the quality of systematic reviews, AGREE II for appraising clinical guidelines, and GRADE for grading the quality of evidence and strength of recommendations. Kaiser Permanente no longer maintains a standalone methodology for evidence review, but has joined others around the world in using these collaboratively-developed tools. In so doing, we have systematized our own processes for producing, monitoring, and updating guidelines, and have helped raise the global standard for evidence review. Kaiser Permanente is also developing guidelines and evidence products that address patients with multiple conditions. In addition, Kaiser Permanente supports an extensive research enterprise and has been a longstanding contributor to comparative effectiveness research.

Outcomes
Our ability to both develop and adopt evidence-based guidelines has made us a leader in translating guidelines into clinical practice. This is evident in our high health care quality scores, as documented by organizations including the National Committee for Quality Assurance, the National Quality Forum, and the Centers for Medicare and Medicaid Services. The use of evidence-based guidelines also produces direct results for patients. For example, by following the recommendations contained in our cardiovascular guidelines, a high-risk Kaiser Permanente member has a 60 percent lower chance of dying from stroke or heart attack than does a nonmember.

Practical Implications and Transferability
Kaiser Permanente is actively engaged in advancing the science and application of evidence based medicine worldwide. In 2010, Kaiser Permanente became a member of the Guidelines International Network (G-I-N), a collaborative of organizations involved in the development and use of guidelines. Through its work with G-I-N North America, Kaiser Permanente is also actively involved in fostering knowledge-sharing and collaboration within the North American guideline community by organizing and hosting a monthly webinar series on topics of interest to guideline developers in the U.S., Canada, and Mexico. For both G-I-N and its North American network, we contribute knowledge about methodology development, guideline content, and implementation strategy. The goal is to globalize evidence synthesis and grading to standardize processes in evidence review. This will create efficiencies and allow local guideline teams to focus on creating implementable recommendations that improve patient care.

For more information, please contact:
Kaiser Permanente Institute for Health Policy at http://www.kp.org/ihp

1 Institute of Medicine, Knowing What Works in Health Care: A Roadmap for the Nation, 2008.
3 Institute of Medicine, Standards for Developing Trustworthy Clinical Practice Guidelines, 2011; Institute of Medicine, Finding What Works in Health Care, 2011.