The year 2000 has been an extremely productive and successful one for HSR&D. Through a diverse and creative research portfolio that includes 149 ongoing funded projects, HSR&D researchers are focusing on a broad array of important health issues affecting veterans and the nation. Among the high-priority areas targeted by HSR&D research are access to care, patient safety, telemedicine, and the implementation of clinical practice guidelines. HSR&D investigators have had more than 1,500 publications in FY 2000. In addition we have increased our dissemination efforts to make sure findings get to managers and policy makers in a timely and accessible manner.

We’ve also been building our research capacity through our Career Development programs. Fifty-eight clinicians and Ph.D. scientists were given awards this year to continue research that will have a positive impact on the quality of veterans health care.

Last but not least, there is the Quality Enhancement Research Initiative (QUERI). This groundbreaking initiative, to which this issue of FORUM is dedicated, focuses on translating research results into practice so that quality improvement will become systematized. Beginning its third year, QUERI is fast becoming a national model for quality improvement.

QUERI has formalized processes that promote evidence-based health care while at the same time refining and honing our research agenda. There are eight QUERI groups, each of which focuses on a clinician condition with a high level of prevalence or risk among VA patients (see box on page 3). For each condition, the QUERI research and clinical leaders use a six-step process (see box on page 3) to identify what we know about the state-of-the-art in quality improvement and put that knowledge into clinical practice. It is a way of systematizing quality improvement at the national level.

In keeping with the Strategic Framework for Quality Management initiated throughout VA in the mid-1990s, by then-Under Secretary Kenneth W. Kizer, M.D., M.P.H., QUERI merges the complex, interwoven processes that support evidence-based decision making. The QUERI mission to translate research discoveries and innovations into better patient care and systems improvements can only be fully achieved over time and in stages. Still, the power of research becomes most striking when a QUERI group takes a strong finding (either original or published best practice information) and implements a plan to take this evidence to the bedside and to the policy table. QUERI translation activities not only assure that findings reach decision makers and promote targeted interventions, but also follow up to see that their impact is measured and reported.

For example, the Spinal Cord Injury (SCI) QUERI is seeking to improve outcomes for veterans with SCI by focusing on preventive health practices. Its first goal is to increase influenza vaccination rates in the VA SCI population. Because pulmonary conditions are
Commentary

continued from page 1

a leading cause of mortality and morbidity among SCI patients, increasing vaccination rates may reduce complications and other adverse outcomes from influenza or pneumonia. A multi-pronged approach involving patient and provider interventions (including tools that promote targeted education and reminders) will be used and special effort made during the flu season. Patients will be monitored to see who is offered and administered a flu vaccine; comparisons will be tracked year to year.

The impact of vaccination will be evaluated by linking rates of healthcare use to incidence of influenza, pneumonia, and related respiratory disorders during each flu season from 1998 to 2001. Outcome and process data will be reported. By preventing respiratory infections, the SCI QUERI expects to substantially reduce the 37 percent excess mortality associated with influenza or pneumonia, and hopes to enhance both patient quality of life and cost savings.

Translation efforts such as those of the SCI QUERI are planned and rigorously reviewed prior to execution. The strategies and tools used to move a research finding into action are documented in a Translation Plan that becomes part of a larger Strategic Plan, which spells out the scope of work for each QUERI group.

Translation strategies include multifaceted efforts to target key audiences for seminars and interactive online education, as well as ongoing initiatives to identify clinical champions and opinion leaders. These strategies complement the 120 or more tools developed across QUERI groups to promote use of research findings.

Those tools are specifically designed to make it easier for clinicians to provide good, appropriate care and harder to stray from evidence-based decision-making. QUERI tools are quite diverse and range from simple pocket cards and posters to highly sophisticated decision support systems.

Tool boxes that combine strategies and tools are also popular and several are being tested for their effectiveness in promoting optimal outcomes. Each Translation Plan identifies the dissemination, implementation, and evaluation strategies and tools needed to promote use of findings in everyday practice situations across the VA:

- **Dissemination.** Blanket distribution of information to potential stakeholders is not enough on its own to effect change. Dissemination activities communicate important information to targeted audiences in useful formats and promote interactive learning and retention. Popular dissemination strategies include interactive computer programs, web sites, mailings, and seminars.

- **Implementation.** Once disseminated, multiple implementation activities are launched, using effective strategies designed for targeted audiences working within specific settings. Communication, education, and administrative strategies are used to overcome real and potential barriers. Facilitating factors are identified and reinforced. A network of opinion leaders and clinical champions facilitates implementation.

- **Evaluation.** Using scientific methods, information is collected and analyzed to determine the impact, effectiveness, efficiency, return on investment, and cost-effectiveness of dissemination and implementation activities.

By Robert A. Petzel, M.D., Director, VA Upper Midwest Network 13

VA is trying to transform itself into a learning organization — a place where we are continuously re-examining what we know and striving to produce important new knowledge. This is a difficult task that requires the commitment and involvement of everyone in VA.

But expanding our knowledge base is really only part of the equation. Implementation of that knowledge — putting it to practical use — is the other part. When it comes to improving patient outcomes, the issues of implementation are complex. In fact, the concept of how to put new clinical knowledge into practice has been studied a great deal recently. The problem is that we have a better understanding of what doesn’t work than what does. It is clear that the traditional methods of knowledge diffusion — including conferences, journal articles, and grand rounds — do not substantially impact medical practice. It is also clear that publishing guidelines, policies, and regulations does not effectively change the behavior of individual practitioners.

This is where VA’s Quality Enhancement Research Initiative (QUERI) is playing an important role. QUERI has focused and systematized VA’s efforts to improve the evidence base for clinical practice. Areas of high risk and high volume have been identified. Baseline practice patterns, outcomes, and variations from best practices are being defined. Research has been funded and initiated in a large number of important areas. Spinal cord injury and diabetes are two areas where this focus has resulted in recommendations for significant changes in clinical practice.

The literature on how new knowledge is diffused throughout an organization is growing. A VA group is now engaged in reviewing this literature and trying to understand how knowledge is diffused, down, and across our organization. Researchers, particularly those in our Health Services Research and Development Service, have a responsibility for developing new information (even about knowledge diffusion).

Implementation, however, is a team effort. Research, operations, and education all contribute to the diffusion of new knowledge. They must work together. No one element can do it alone. Likewise, QUERI is an important initiative, but needs to be a part of this larger effort, so that we are constantly communicating and applying new knowledge across the VA. This is everyone’s responsibility.

continued on page 3
Commentary

Evance, and/or progress of translation activities. Measurable changes in processes and outcomes are documented and feedback is provided.

Already, QUERI’s success is documented in the research findings rapidly being generated to fill gaps in best practices, in the tools being developed to take QUERI findings to the bedside, and various publications of QUERI results. But traditional output of this kind is not sufficient. From the outset, QUERI participants were expected to demonstrate accountability. It is not enough to publish findings and move onto the next study or develop a guideline and assume that it is followed.

Together, the researchers and clinicians participating in QUERI go the next step by implementing findings, measuring the impact of those evidence-based interventions, and then reporting on outcomes and system improvements. The value of these findings for improving both veterans’ health and the VA health system as a whole is clear. In the brief time that QUERI has been operating, several improvements have been documented. For example, the Diabetes QUERI (in work done in collaboration with VA’s Office of Policy and Planning, Patient Care Services, and the Office of Quality & Performance) documented that VA surpasses the private sector in many diabetic quality standards. The diabetes group then

continued on page 8

Response

By Jonathan B. Perlin, M.D., Ph.D., M.S.H.A., Chief, Office of Quality and Performance

Between research and practice stands the interface between efficacy and effectiveness. Researchers, even health services researchers, have traditionally focused on the arena of efficacy. In that arena, the world is more orderly. Within the investigators’ control are the parameters that create the elegant symmetry of placebo-controlled random assignment. As effectiveness studies humbly remind us, such symmetry is absent in “the real world.” Also missing is the consistency of support systems that may have influenced efficacy in the research environment.

What are the limitations of experimental design that diminish successful generalization from efficacy to effectiveness? What characteristics of the prototype setting are necessary for preliminary success to be achieved in a diversity of “real-world” clinical environments? And how do we reliably follow the trajectories of practices introduced from research to know if they are falling short, meeting, or even exceeding their promise?

VA’s mission to provide optimal health care to veterans means that achieving effectiveness is not a luxury, but a prerequisite. VA has articulated its core values as “Value-Domains”: quality, satisfaction, access, maximizing functional status, efficiency, and building healthy communities. The study, understanding, and achievement of effectiveness in each “value domain” is our responsibility as we meet the challenge of delivering maximal health care utility within a defined budget. This is a challenge for health care even more broadly. The VA system is an ideal, dynamic, living-laboratory for health services research. We have the scale, scope, consistency of purpose, and improving information systems. The brilliance of the VISN approach allows us to “think globally, but act locally” — often conferring the properties of a natural experiment. What are the unique local or regional structural differences, or characteristics of processes, that confer the most desirable health outcomes? How can those structural features or process characteristics be understood or captured for application elsewhere? And how do we measure most efficiently to ascertain that we are achieving our goal of significantly improving the health care of veterans?

Between research and practice stands the interface between efficacy and effectiveness. Between research and practice stand all of the issues and questions posed above. At this interface is the recognition that life is not a random process. Within the investigators’ control are the parameters that create the elegant symmetry of placebo-controlled random assignment. As effectiveness studies humbly remind us, such symmetry is absent in “the real world.” Also missing is the consistency of support systems that may have influenced efficacy in the research environment.

Steps in the QUERI Process:

1. Identify high-risk/high volume diseases or problems.
2. Identify best practices.
3. Define existing practice patterns and outcomes across VA and current variation from best practices.
4. Identify and implement interventions (including performance criteria) to promote best practices.
5. Document that best practices improve outcomes.
6. Document that outcomes are associated with improved health-related quality of life.

The QUERI Groups

QUERI focuses on eight conditions due to their high volume and/or high risk among VA patients: chronic heart failure, diabetes, HIV/AIDS, ischemic heart disease, mental health, spinal cord injury, stroke, and substance abuse.
QUERI Lipid Project Helps Chart Course for Better Treatment of Patients with Ischemic Heart Disease

By Ann Sales, M.S.N., Ph.D, Sandra Pineros, M.P.H., P.A.C., Helene Starks, M.P.H., and Haili Sun, Ph.D.

Findings from the Lipid Measurement and Management System, a rapid-response project within the Quality Enhancement Research Initiative in Ischemic Heart Disease (QUERI-IHD), illustrate the potential for research to influence both clinical practice and policy. The objective of the QUERI-IHD is to improve outcomes of veterans with IHD using health services research methods to identify, implement, and evaluate interventions to improve compliance with national treatment guidelines.

VA guideline recommendations for secondary prevention of IHD include lipid measurement for all veterans with IHD and serum LDL cholesterol level less than 100 mg/dL. The Lipid Measurement and Management System project was designed to define variations in practice and outcomes within and across veterans integrated service networks (VISNs). We identified patients with IHD, determined whether their lipid levels were being measured, defined lipid-lowering therapies, and compared lipid levels among VA patients with national guideline-specified standards. In the process, we demonstrated variations in practice across VISNs 1, 16, 20 and the Cincinnati Veterans Ambulatory Medical Center. By combining electronic data from multiple sources, we were able to define current practice, guideline compliance, and variation in care without chart abstraction and compare those findings within and across VISNs.

Our study included 24 medical centers in four VISNs. We identified 41,366 veterans with IHD across all study sites — roughly 10 percent to 12 percent of all veterans treated in VA facilities. This is actually a conservative estimate, because of the design of our identification algorithm. On average, we found that 66 percent of patients with IHD were current on their LDL tests. The lowest rate for a VISN was 56 percent; the highest was 72 percent. The range across medical centers was much higher: 38 percent to 82 percent. All of these differences are statistically significant. In each case, thousands of veterans are affected.

We recommend putting more resources into LDL measurement, which is the first step in assessing an IHD patient's risk for recurrent events.

The percentage of patients receiving some kind of drug therapy to lower LDL was relatively similar across VISNs, ranging from 56 percent to 58 percent. This suggests two things. First, some patients are being treated without a current LDL measurement in the clinical information system. Second, there is less variation at the VISN level for lipid-lowering therapy than for LDL measurement. This difference is statistically significant, but may not be as clinically significant or important for policy than the difference in LDL measurement. However, there is considerably more variation among medical facilities than among VISNs in the percentage of patients — 35 percent to 68 percent — receiving lipid-lowering agents.

Finally, we examined the proportion of patients who have attained the guideline-recommended LDL goal of 100 mg/dL or less. The proportion of patients attaining this goal across VISNs varied from 40 percent to 46 percent. This difference is also statistically significant, as well as clinically significant, since it again affects thousands of veterans. Variation across medical centers was even more extreme, ranging from 34 percent to 53 percent.

Our findings have considerable clinical and policy relevance. The gap between what is recommended in clinical guidelines and what is actually done in practice is significant — both for measuring LDL levels and treating with lipid-lowering drugs. Of particular concern are the differences among medical centers in the proportion of IHD patients who attain the recommended goal of 100 mg/dL or less. It is difficult to find appropriate benchmarks in the private sector, but the highest rate of goal attainment that we found, 53 percent, is still regarded as low compared with best practices in the private sector.

Based on these findings, we recommend putting more resources into LDL measurement, which is the first step in assessing an IHD patient’s risk for recurrent events. The gap in performance here is very stark. It may be possible to begin to address the second step, initiating and then optimizing drug therapy, as rates of LDL measurement improve.

Improvement on these measures is both possible and necessary. The benefits to veterans are clear in terms of lowered disease burden, improved quality of life, and enhanced longevity. The benefits to VA are also clear. Cost savings will derive largely from decreased admissions for heart attack and unstable angina. In an integrated delivery system, it should be possible to adjust costs and savings so that both the system and its patients benefit.

For more information, please contact Helene Starks at 206/764-2868, email Helene.Starks@med.va.gov.
Cross-Cutting QUERI Project Targets Determinants of Clinical Guideline Implementation Effectiveness

By Bradley N. Doebbeling, M.D., M.Sc., Iowa City VAMC and University of Iowa; Bonnie J. Boots-Miller, Ph.D., Iowa City VAMC; Thomas Vaughn, Ph.D., and Marcia Ward, Ph.D., University of Iowa

Successful application of new research findings to clinical practice requires effective implementation strategies. Identifying such strategies is not as easy as it sounds. Within a given organization, structural characteristics, managerial attitudes, and relationships with outside entities all influence the structure, process, and outcome of implementation strategies.

At the VA, a cross-cutting project of the Quality Enhancement Research Initiative (QUERI) based at the Iowa City Veterans Affairs Medical Center (VAMC) is exploring factors that affect compliance in VA facilities nationwide with VA clinical practice guidelines.

We are examining the relationship of effective guideline implementation to VA facilities' organizational characteristics, implementation structures, and processes. Further, we are investigating these factors and effects across several guidelines to explore how characteristics of each guideline affect implementation and adherence.

The specific aims of our research are to:

- Describe rates of adherence with current VA clinical practice guidelines in VA acute care facilities.
- Identify provider and manager level factors associated with effective guideline implementation using focus groups and individual interviews.
- Identify organizational structures and processes as well as characteristics of implementation work groups that are associated with timely and effective dissemination of and adherence with clinical guidelines within VA facilities nationally.
- Develop and validate predictive models of the relationships among facility organizational characteristics; guideline characteristics; and measures of the guideline implementation process and outcomes, with an emphasis on provider adherence.

This is a multi-method, quasi-experimental national study using qualitative and quantitative research methods to analyze the process of guideline implementation. VA medical centers nationwide have been selected to represent a range of geographic, bed-size, teaching affiliation, and patient population (gender and racial/ethnic) distributions. In this first phase, we have been conducting focus groups and interviews of primary care administrators, providers, and staff at selected facilities. Currently, we have completed 50 focus groups in 18 facilities. These groups have helped us to better understand the process of clinical guideline implementation and to identify important barriers and facilitators and have informed development of a survey for the second phase of the project. Based on our work to date, compliance appears to be influenced by the organizational culture, implementation process, characteristics of the guideline itself, and by rewards and sanctions at the organizational level. The qualitative data have enhanced our understanding of guideline implementation efforts and informed development of a survey for the second phase of the project.

In Phase 2, performance improvement coordinators and mid-careerists were interviewed. Performance improvement coordinators and mid-careerists were interviewed.

Career Development Awardees Graduate, Continue Work

Three members of HSR&D’s fourth class of Career Development awardees graduated this summer. Sam Bozzette, Raul Garcia, and Dawn Provenzale all started at the entry level in 1994, progressed through the program and are now successful independent investigators assuming mentoring and other leadership roles at their facilities.

Sam Bozzette, M.D., Ph.D., remains on staff at the San Diego VA Medical Center. Sam has been involved in HIV/AIDS research since the start of his Career Development award, and has produced many publications from this work (one of which earned an “Article of the Year” award from the Association for Health Services Research). He currently heads the HIV Research Coordinating Center for the Quality Enhancement Research Initiative (QUERI).

Raul Garcia of the Boston VA Medical Center is the first dentist to complete the program, and has served as mentor for other dentist awardees. He is principal investigator for a project that ended in October.

Dawn Provenzale, M.D., M.S., remains on staff at the Durham VA Medical Center. Dawn is a successful HSR&D principal investigator who is continuing the work she began under her Career Development award, studying screening and surveillance techniques for gastrointestinal malignancies, including esophageal carcinoma and colon cancer. Dawn has been an active mentor and is working to develop a training program for GI fellows interested in health services research.
Although research has shown that telephone care can improve access, such programs can be labor-intensive and difficult to implement. VA's Quality Enhancement Research Initiative Diabetes Module (QUERI-DM) is evaluating the potential for automated telephone care to improve diabetes treatment within VA. Using voice-recognition technology, automated telephone disease management (ATDM) programs allow patients to report information about their health status and health behaviors between clinical visits. Based on their reports, patients receive tailored ATDM educational messages and follow-up by a telephone care nurse or primary care team. The intervention is designed to improve diabetes treatment outcomes by enhancing the quality of information available for clinical decision-making, promoting more rational allocation of treatment resources, and helping patients perform self-care activities.

Research Shows Positive Results

Previous studies indicate that diabetes patients will respond to ATDM calls over an extended period of time, report reliable information via ATDM, and choose optional ATDM self-care education messages. In one study, VA patients receiving ATDM calls with nurse follow-up for one year reported better self-care than randomized controls, were more likely to have had their cholesterol tested (87 percent versus 78 percent), and were more likely to be seen in podiatry clinics (62 percent versus 42 percent). Among patients with baseline HgA1c levels greater than 9 percent, mean endpoint values for intervention and control patients were 9.2 percent and 10.2 percent respectively. Finally, intervention recipients at follow-up reported fewer symptoms than control patients and were more satisfied with their VA care. These findings corroborate results from a prior trial conducted in a county health care system.

The current QUERI-DM study is assessing an enhanced version of an ATDM system developed through prior research. In Phase 1 of the study, we are developing ATDM assessment instruments for monitoring a range of patient outcomes, including symptoms, self-care, health-related quality of life, and satisfaction with VA care. Eight hundred patients from two veterans integrated service networks (VISNs), VISN 12 and VISN 21, are receiving weekly ATDM assessments for six months. Other data are being collected quarterly via laboratory testing, chart review, surveys, and utilization databases. Analyses focus on the reliability and validity of ATDM assessment data. We also are examining variations in ATDM-reported outcomes across networks, facilities, and sociodemographic groups. Most importantly, we are evaluating the extent to which ATDM assessment information can help clinicians better identify patients at greatest risk for developing acute illnesses and complications.

QUERI Conducts “Real World” Test

In the second phase of the study, we will use the findings from our process evaluation to modify the ATDM assessments and design provider feedback reports. We will enroll 120 patients from each of four participating facilities and use a randomized design to evaluate the impact of ATDM assessment and self-care education calls with clinician follow-up. In contrast to prior efficacy studies in which ATDM follow-up was provided by a study nurse, this effectiveness trial will determine whether ATDM is beneficial when follow-up is conducted by “real-world” VA clinicians. Endpoints for the trial include glycemic control and patient-centered outcomes, such as symptoms and satisfaction with VA care. Cost analyses will focus mainly on VA costs, although costs reported in Medicare claims files also will be examined.

In summary, this study will determine whether an ATDM assessment and self-care education system is an effective strategy for monitoring the health of large panels.
Dr. Kevin Weiss Takes Helm at Midwest Center of Excellence

The Midwest Center for Health Services and Policy Research (MCH-SPR), one of HSR&D's 11 Centers of Excellence, has recently welcomed a new director, Kevin B. Weiss, M.D., M.P.H., M.S.

Prior to joining VA, Dr. Weiss was an associate professor of internal medicine at the Rush Medical College and director of the Center for Health Services Research at the Rush Primary Care Institute, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Ill. Previously, he was associate professor of health care sciences and medicine at the George Washington University Medical Center in Washington, D.C. and research fellow at the Center for Health Policy Research at George Washington University. He has also held positions at the National Center for Health Statistics of the Centers for Disease Control and Prevention, and the National Institute of Allergy and Infectious Diseases (NIAID). He is also a former Robert Wood Johnson Generalist Physician Faculty Scholar.

As director, Dr. Weiss plans to build on MCHSPR’s long tradition of excellence in research both within and beyond the VA system. The next few years will serve as a springboard for a number of new program goals and initiatives for the MCHSPR, including increased interaction with universities in the MCHSPR community, stepped-up efforts in collaboration with other VA hospitals and health services research field programs, as well as new research initiatives.

HSR&D Annual Meeting 2001 Focuses on Access and Outcomes

"VA Health Services Research: Improving Access and Outcomes" will be the theme of the 19th Annual Meeting of the Health Services Research and Development Service (HSR&D), to be held Feb. 14-16, 2001, in Washington, D.C. HSR&D’s Center for Chronic Disease Outcomes Research, located in Minneapolis, will host the meeting, bringing together researchers, clinicians, and policy makers to discuss new and important health services research issues. Topics such as performance monitoring, practice guidelines, evidence-based decision-making, and organizational theory will be explored and debated.

Annual Meeting highlights include an opening reception and dinner, a Proposal Development Workshop, a Special Interest Round Table Luncheon, and a Pre- and Post-Doctoral/Fellow Poster Competition.


HSR&D Announces New Solicitations

In collaboration with VA’s Office of Quality and Performance, HSR&D recently issued two new Special QUERI Solicitations for Service Directed Projects (SDPs). The first, “Translation of Findings into Practice,” is designed to promote quality of care by translating existing findings into practice. It covers both the translation of findings and the study of translation itself. The second solicitation, “Translation of Hypertension Research Findings into Practice,” targets a serious problem for countless veterans. The purpose of this solicitation is to fund projects that measure the translation of existing research findings concerning hypertension treatment (such as the improvement of blood pressure control) into practice. New knowledge about the etiology, diagnosis, or treatment of hypertension is not part of this solicitation.

Concept papers for these solicitations must be received at HSR&D Headquarters by Friday, Nov. 3. Proposals are due by Thursday, Dec. 7. For more information, visit the QUERI web site at http://www.va.gov/resdev/queri.htm.
Commentary
continued from page 3

went on to study and refine several related guidelines. In this way, QUERI not only influences patient outcomes and overall quality, but also promotes positive policy change.

Goethe observed that “knowing is not enough: we must apply. Willing is not enough: we must do.” In doing so, he demonstrated an intuitive understanding of what it takes to improve quality on an ongoing basis in real situations. What those participating in QUERI witness each day is the complexity involved in enacting and sustaining practice and system-wide change.

But the most significant contribution of QUERI may prove to be even more difficult to measure. Here, we refer not to clinical practice change but to policy change. The evolution of a system-wide approach to quality improvement in the largest integrated health care system in the country is opening the doors and secret passageways that guard local, regional, and national policies and their linkages. As information exchange between these levels becomes part of the daily routine, positive actions are taken and the organization moves forward. Although QUERI clearly is producing a tangible output that is benefiting many patients, its most important legacy ultimately may be in the light it is shedding on what it takes to systematically promote sound, evidence-based policies on an ongoing basis.

Guidelines
continued from page 5

level managers in all VA facilities will be surveyed to determine what approaches are being used to implement clinical guidelines. These surveys include questions about the implementation methods used for recently mandated guidelines, institutional support, respondents’ attitudes and beliefs about the usefulness of specific guidelines, availability of feedback, and provider adherence, as well as barriers and new approaches to incorporating guidelines into clinical practice.

The final two years of the project (if funded in a competitive renewal) will involve an in-depth exploration of implementation of newly mandated guidelines. Phase 3 will focus on a subset of VA facilities — those with high or low rates of adherence to a range of previously mandated guidelines. This process evaluation will involve detailed telephone surveys of a sample of key administrators, mid-level managers, and clinicians to identify the steps in the implementation process. Phase 4 will involve a second mailed survey to all VA facilities to validate earlier findings on key factors in the implementation process that differentiate facilities with high and low rates of adherence. This set of surveys will be developed for administrators and practitioners who are involved in the clinical areas affected by the guidelines that were nationally mandated during the study year. Analysis of the results of these surveys will identify the implementation process factors that vary across institutions and the degree to which these factors are associated with adherence.

We believe this project will advance the QUERI directive of translating research into practice and lead to many benefits for VA, not least of which is improved health care for veterans.

QUERI
continued from page 6

of VA patients with diabetes and circumventing access barriers. By focusing clinical resources more effectively and improving patients’ self-care, the intervention may cost-effectively improve diabetes outcomes. Moreover, ATDM may be a useful means of monitoring patient-centered indicators of the quality of ambulatory care, a dimension of quality assessment that has been largely overlooked because of the difficulties and expense of gathering such information.