

FORUM *translating research into quality health care for veterans*

August 2006

VA Health Services Research & Development Service

Contents

Director's Letter	2
Response to Commentary	3
Research Highlights	4
Overview of PT/BRI QUERI	6
<i>Implementation Science</i>	7

QUERI II: The Next Generation

By Joseph Francis, M.D., M.P.H., Acting Deputy Chief Research and Development Officer, and Associate Director, HSR&D QUERI

With eight years of experience, the Quality Enhancement Research Initiative (QUERI) is not only looking back and taking stock but also moving forward in new directions. From its beginning in 1998, QUERI emphasized the implementation of evidence-based research into improvements in routine care. Today there are 10 QUERI Centers that focus on a disease or condition, including colorectal cancer, diabetes, heart disease, HIV/AIDS, mental health, substance use disorders, spinal cord injury, stroke, and polytrauma and blast-related injuries. These groups have developed and tested interventions resulting in significant improvements in the quality of care received by veterans.

Successes and Lessons Learned

The VA initiated QUERI as an “output-oriented approach to quality improvement.”¹ True to this promise, many QUERI projects have developed interventions resulting in dramatic improvements in quality of care, including doubling the flu vaccination rates among spinal-cord injured veterans. QUERI projects have facilitated the spread of collaborative care for depression in VA's primary care settings and improved adherence to antidepressant medication. Other successes include:

- Decreased use of inappropriately high doses of oral antipsychotic drugs for schizophrenia and a corresponding decrease in costs;
- Improved adherence to guideline-based treatment of HIV;
- Increased use of opioid agonist therapy among patients with narcotic addiction; and,

- Decreased readmission for patients with chronic heart failure.

QUERI groups are evolving to meet the changing needs of veterans. Recent projects have focused on patient self-management, one example being peer counseling for diabetic self care. QUERI groups are also collaborating with important VA operational offices that are championing the use of technologies, including implementation of personal health records (MyHealtheVet) and distance technologies for coordinating care in home and community settings. Other projects include evaluating the use of electronic evidence-based recommendations and the routine feedback of patient-reported health status to providers.²

While QUERI has achieved remarkable success in eight short years, challenges experienced by the Centers offer important lessons as QUERI enters its next phase. Chief among these lessons is the need to increase collaboration and interaction between researchers and other areas of the VA that are devoted to quality improvement. This will ensure the uptake of findings into practice. One obstacle to overcome in this regard is the difficulty in funding collaborative efforts through existing grants and budgets.

Looking Ahead to a New Generation of QUERI

VA is now turning its attention to creating a leaner and faster QUERI framework with an emphasis on collaboration and pilot studies

continued on page 2



A publication of the VA Office of Research & Development, Health Services Research & Development Service, Center for Information Dissemination and Education Resources, in conjunction with AcademyHealth

Director's Letter

While many FORUM readers may have experience with the work of at least one QUERI group, consensus at our last FORUM Editorial Board meeting was that many readers may not have a comprehensive understanding of the overarching QUERI goals and accomplishments to date. Thus, this special FORUM supplement focuses on QUERI. First, Dr. Francis ably summarizes QUERI's foundation, the current state, and where it is headed. Dr. Ordín then provides an important operational viewpoint on QUERI efforts. Partnerships between operations and research are critical to the success of QUERI. Two QUERI research efforts are highlighted and the newest QUERI, the Polytrauma and Blast-Related Injuries QUERI, is profiled.

In other news, we are pleased and proud of the strong presence VA HSR&D made at the recent Society of General Internal Medicine (SGIM) and AcademyHealth Research Meetings. At SGIM in Los Angeles last April there was a special VA symposium on implementation of evidence-based care models as well as VA participation in numerous other sessions on topics such as health disparities and caring for veterans returning from Iraq. At the AcademyHealth Meeting held in Seattle last June, a special VA session highlighted the impact of global conflicts on the VA Health Care System, as well as other sessions on managing chronic disease and lessons from implementation of the electronic health record. In addition, nearly 50 VA researchers were presenters or moderators of sessions and an additional 71 HSR&D researchers had poster presentations. This visibility is evidence of the high quality and timely research that is conducted by our many talented HSR&D investigators.

Mark your calendars! HSR&D's National Meeting is scheduled for February 21-23, 2007. See www.hsrd.research.va.gov/about/national_meeting/2007 for details.

Shirley Meehan, M.B.A., Ph.D.
Acting Director, HSR&D

that will yield "fast track" results. The new generation of QUERI will focus broadly, and not just restrict new activities to single diseases or conditions. One aspect that will remain unchanged, however, is QUERI's focus on studying and implementing research that targets high-priority health care problems faced by veterans.

The goals of the next generation of QUERI are to:

- Create a strong partnership between researchers and facility leaders;
- Seek evidence-based interventions for a broader range of conditions affecting veterans;
- Identify opportunities for VA researchers to collaborate in national initiatives; and,
- Assess on an ongoing basis the research pipeline and its relation to the care and needs of veterans.

These goals will demand a new activist role for QUERI—and for HSR&D—as facilitators and partners in systems transformation. The emphasis will be on faster and more responsive research and implementation. QUERI should aim not to shoulder the burden of large national implementation but to test "hands-on" implementation with small-scale pilots and medium-sized projects. With a tight budget, QUERI will need to start small and act fast, with a focus on sustainable, optimal interventions, and further use of partnerships within VA to scale these up to a national level.

VA's newest QUERI Center reflects these goals. The Polytrauma and Blast-Related Injuries QUERI addresses the needs of young veterans returning from Iraq and Afghanistan who have survived blast injuries. These men and women have sustained multiple and traumatic injuries—including brain injury, amputation, and mental illness—that require complex care.³ As a result, the Polytrauma and Blast-Related Injuries Center reflects an interdisciplinary and co-morbidity oriented approach that is a hallmark of the new

QUERI. The VA's next QUERI Center will address home- and community-based long term care and managing the needs of veterans with multiple chronic illnesses.

Innovations in technology have been a central component of QUERI. The new generation of QUERI projects will enhance the VA's ability to use the Electronic Medical Record (EMR) for systems learning. The EMR has enabled VA to improve care management for diabetes patients by collecting information regarding prevalence, comorbidities, and costs into a diabetes database (DEpic). The EMR of the future will become a patient health record that the patient owns and controls, as well as a platform for continuous learning by system clinical leaders in partnership with VA researchers.

As QUERI moves in these new directions, VA is also committed to using the latest technology to develop the capacity and skill sets of its investigators. HSR&D's new Cyber Seminars program reflects this commitment (see related article page 7).

While QUERI has achieved remarkable success since its inception, it is time to build on these early accomplishments with the goal of continually improving the care received by veterans. Ultimately, the new generation of QUERI will create a learning system where clinical care, data, and research are interlinked and VA is recognized as a premier health system for generating and applying knowledge to improve the health of veterans and the nation. ■

References

- 1 Francis J, Perlin J. Improving performance through knowledge translation in the Veterans Health Administration, *The Journal of Continuing Education in the Health Professions* 2006, 26(1):67.
- 2 QUERI Quarterly, Vol. 7, No. 1, March 2005, p. 1.
- 3 Francis and Perlin, p. 68.

Response to Commentary

QUERI II and VA Performance Improvement

By Diana Ordin, M.D., M.P.H., Director, Quality Improvement, Office of Quality and Performance

Performance measures are important drivers—perhaps the most important drivers—of systematic quality improvement efforts within VA. Performance measures are selected based on their importance in improving and maintaining veterans' health, and in improving VA efficiency and effectiveness. At the operational level, performance measures delineate performance improvement priorities, and VISN and medical center leadership are held accountable for performance measure results.

The VA has attained remarkable levels of quality of care in areas addressed by performance measures. Asch *et al.* reported that VA patients received higher quality care compared with non-VA patients over a broad spectrum of clinical areas, noting that the VA advantage was most prominent in processes targeted by performance measures.¹ Numerous examples (e.g., surgical infection prevention measures, pneumonia measures) of supporting indicators improving only after becoming performance measures, provide further evidence that performance measures are effective in driving improvement. See performance measures section of vawww.oqp.med.va.gov/.

Opportunity for Further Improvement

Despite the demonstrated ability of VA to improve (and sustain improvement) on performance measures, there is considerable opportunity to increase both the extent and pace of improvement. For many performance measures, even some with high overall VA performance, there is variation in performance across medical centers, as well as variation in improvement rates once improvement begins. For many performance measures, evidence-based

improvement strategies have been neither described in the literature nor systematically identified and disseminated within VA in a manner meeting the improvement imperatives of VISNs and medical centers.

The first-generation QUERI produced many high-quality studies. However, the disconnect between QUERI research and the operational components of VA, and differing expectations of researchers and on-the-ground improvers of care, meant that much of QUERI's output failed to address the most pressing needs of VA care providers in a timely manner.

The second generation of QUERI, as described in Dr. Francis's article, is designed to address these issues. The new "leaner and faster" QUERIs, with "increase(d) collaboration and interaction between researchers and other areas of the VA" and addressing a broader range of clinical issues, are likely better able to assist the VA system's most urgent improvement priorities, including those embodied in performance measures.

Quality Improvement Technical Assistance Projects

Current collaborative efforts between QUERI and other ORD researchers, Program Offices, and regional and medical center staff illustrate QUERI II's potential contribution to rapid improvement on performance measures. With funding primarily from the Office of Quality and Performance, these Quality Improvement Technical Assistance Projects (QI TAPs) use literature reviews, analysis of VA performance measures data, and interviews with high, low, and rapidly-improving performers to identify, package, and disseminate readily-usable information

on "effective" care processes for selected performance measures. Technical Advisory Teams, consisting of clinical content experts and field quality improvement and clinical staff who are involved in the relevant processes of care, inform project design and product. Performance measures selected for these projects are those with the greatest system-wide potential for improvement across multiple medical centers—and for which there is some evidence, either inside or outside the VA, that high performance is achievable.

Current QI TAPs address a range of performance measures, including:

- prevention of surgical site infection,
- timely administration and appropriate selection of antibiotics for community-acquired pneumonia,
- emergency room processes of care for acute coronary syndromes,
- missed appointment opportunities,
- consult completion rates,
- delays in lung cancer diagnosis and treatment, and
- timeliness and reliability of colorectal cancer diagnosis and treatment.

The key challenge for researchers engaged in these projects is developing methods for identifying "effective" processes of care using what is essentially a set of anecdotes. We hope that these and future collaborations will enable QUERI II and other ORD researchers to pioneer development of "rapid-cycle" methods for identifying evidence-based improvement strategies—methods that will meet the urgent needs of VA leaders and care providers. ■

References

1 Asch SM, McGlynn EA, Hogan MM, et al. Comparison of quality of care for patients in the Veterans Health Administration and patients in a national sample. *Annals of Internal Medicine* 2004; 141:938-45.

Research Highlights

Measuring Quality of Care for VA Patients Who Misuse Alcohol

By Katharine Bradley, M.D., M.P.H., Daniel Kivlahan, Ph.D., Emily Williams, M.P.H., Eric Hawkins, Ph.D., and Carol Achtmeyer, M.N., Northwest HSR&D Center of Excellence for Outcomes Research in Older Adults, and Center of Excellence in Substance Abuse Treatment and Education, (CESATE), VA Puget Sound University of Washington

Almost a quarter of VA patients misuse alcohol, meaning they drink at levels associated with adverse health outcomes or meet diagnostic criteria for alcohol abuse or dependence (AUDs). Randomized controlled trials and multiple meta-analyses have demonstrated that offering brief counseling to patients who misuse alcohol results in decreased drinking. Moreover, based on the magnitude of health benefits and cost effectiveness, a National Commission recently ranked brief alcohol counseling among the top 10 U.S. prevention priorities. However, this evidence-based practice has not been widely implemented. Over the past five years, the Substance Use Disorders (SUD) QUERI has developed practical measures to identify and risk-stratify patients with symptoms of alcohol misuse, to monitor brief alcohol counseling, and to evaluate outcomes, as the first step towards implementing brief alcohol counseling in VA.

Despite widespread alcohol screening, the VA lacked a standard method for identifying patients who misused alcohol until 2004. Prior to this, most VAs used the CAGE questionnaire. This questionnaire, however, only screens for alcohol use disorders and, in fact, many CAGE-positive patients no longer drink alcohol. SUD QUERI investigators determined that the three-item AUDIT-C performed as well as longer screening tests and much better than the CAGE as a brief screen for alcohol misuse when compared to standardized interviews.

In 2004, annual screening for alcohol misuse became a VA performance measure.

Since adopting this measure, rates of screening have been high (93 percent of patients screened), with most sites using the AUDIT-C questionnaire. Following implementation of the screening measure, SUD QUERI investigators wondered whether alcohol screening in clinical practice identified alcohol misuse as effectively as screening in studies where questions were asked verbatim, in a nonjudgmental manner, and in private settings. Analyses of a national sample of VA outpatients found that the prevalence of positive AUDIT-C's documented in medical records in 2004 was significantly lower than when the same patients completed the AUDIT-C on the VA Survey of Healthcare Experiences of Patients (SHEP). As a result, the SUD QUERI is collaborating with the VA Office of Mental Health Service and Office of Quality and Performance to standardize screening with a modified performance measure.

The VA ACQUIP trial tested a paper-based audit and feedback intervention and showed no effect on patient reports of alcohol-related advice or drinking outcomes. Moreover, audio-taped appointments of patients who screened positive for alcohol misuse at one ACQUIP site showed that, despite provider education, alcohol-related discussions were rare, typically awkward, and omitted important components of evidence-based brief alcohol counseling.

We have also compared mailed SHEP surveys and External Peer Review Process (EPRP) chart reviews for measuring provider follow-up on positive alcohol misuse screens. EPRP monitors follow-up assessment of patients who screen positive for alcohol misuse, but was not designed to monitor care in subgroups of patients (e.g. those with alcohol misuse) so the number of patients with alcohol misuse monitored quarterly per VA Network is currently too small for precise performance monitoring. Although the SHEP survey includes the AUDIT-C and asks whether patients have been advised by their VA provider to cut down or stop drinking, patients may not accurately recall or report alcohol-related advice.

continued on page 8

Is the AUDIT-C Overly Sensitive?

Providers administering the AUDIT-C note that patients who report drinking within recommended limits—one or two drinks daily—can score positive on the AUDIT-C (four points). How can that be? This occurs because the AUDIT-C score is an effective screening test when used as a scale, but the amount a patient reports drinking on questions one and two of the AUDIT-C is often an underestimate of patients' reports of their drinking when they are interviewed with more detailed standardized interviews, which are the "gold standard" for alcohol-related research. We therefore encourage clinicians to think of the AUDIT-C as a scale like HATC or blood pressure. Second, a significant minority of VA patients with AUDIT-C scores of four to five have previously received treatment for a drinking problem and 46 percent of these patients report problems due to drinking in the past year (compared to 25 percent of other VA patients with AUDIT-C scores of four to five).

Telehealth Applications for Veterans with Stroke

By Neale R. Chumbler, Ph.D., Rehabilitation Outcomes Research Center & Stroke QUERI, North Florida/South Georgia Veterans Health System, and Helen Hoenig, M.D., M.P.H., Physical Medicine & Rehabilitation Service, Durham VA Medical Center

Stroke is one of the most disabling and costly impairments. According to the VA Stroke QUERI, approximately 15,000 veterans are hospitalized for stroke annually with new strokes costing an estimated \$111 million for acute inpatient care, \$75 million for post-acute inpatient care, and \$88 million for follow-up care in the first six months following a stroke. Rigorous and coordinated inpatient care can improve the health status of patients who have suffered from a stroke.

Barriers to Care

There is increasing attention in implementing mechanisms and programs to reduce hospital lengths of stay for stroke patients. Early discharge rehabilitation programs need coordinated, efficient, in-home rehabilitation; inadequate information about the home setting hinders successful rehabilitation. Regrettably, resources for home-based rehabilitation are limited.¹ Consequently, many veterans must travel considerable distances from their place of residence to the nearest VA hospital, limiting evaluation of the home.² The Stroke QUERI previously found that a large number of acute stroke patients live more than 120 minutes from an inpatient rehabilitation unit (RBU). More than three out of four veterans who experience an acute stroke receive care from hospitals that do not have a RBU.² This finding suggests that barriers to accessing post-acute stroke rehabilitation exist for many veterans. These veterans need a practical, easily accessible, and potentially cost-effective model of community-based stroke rehabilitation.¹

Telehealth technologies (delivery of health care services at a distance) offer the potential to extend post-acute stroke care into the home-setting (“tele-rehabilitation” or TR). TR provides distance support, assessment, and intervention to people with disabilities through telehealth technologies.¹ Despite its potential, there have been few TR applications in stroke. New telehealth methods are needed to manage stroke patients without compromising VA’s standards of high quality care. As a result, there is increasing recognition among health care providers that in-home therapy is a viable rehabilitation strategy to improve independence, safety, and quality of life among older adults with disabilities.

By expanding rehabilitation beyond the hospital, TR could address the barriers experienced by veterans accessing post acute stroke rehabilitation in several ways. First, TR could be used to consult with providers who treated the veteran in the hospital, improving coordination of care. Second, TR could be used for cost-effective follow-up after a therapy home visit. Finally, home health nurses might use TR to provide physical and occupational therapists with crucial information prior to a home visit, increasing efficiency.

New Telehealth Approaches

Chumbler, Hoenig and their colleagues will soon examine a TR intervention that employs telehealth technology to improve rehabilitation outcomes of stroke patients after discharge in the home. The primary aim of the study is to determine the effect

of TR on physical function. This Phase II, four-site, two-arm randomized clinical trial aims to improve functional mobility via two types of telehealth technology. Televideo is used to conduct in-home assessments of functional mobility, to make treatment recommendations, and to provide periodic goal-oriented reassessment, modifying the treatment plan as the patient improves. Televideo uses a mobile, wireless video technology with a home health aid in the patient’s home to provide live visual and audio communication between the patient and the home health aid in the patient’s home, and a therapist located at the base hospital. The second type of telehealth technology is an interactive, in-home messaging device that will be used to facilitate adherence with treatment recommendations and to screen for interval problems (depression, falls, and difficulty with self-care).

TR has potential applicability to other veteran populations needing rehabilitation, including veterans with poly-trauma and spinal cord injury. As more telehealth studies are implemented for older veterans with mobility disability, such as stroke, results could support the creation of national partnerships to implement more effective approaches to coordination of care when transitioning from hospital to home. ■

References

- 1 Lai JCK, Woo J, Hui E, Chan WM. Telerehabilitation—a new model for community-based stroke rehabilitation. *Journal of Telemedicine and Telecare* 2004; 10:199-205.
- 2 Hoenig H, Sloane R, Horner RD, et al. Differences in rehabilitation services and outcomes among stroke patients cared for in veterans hospitals. *Health Services Research* 2001; 35(6):1293-1318.

Overview

The Polytrauma and Blast-Related Injuries QUERI: Evidence-Based Rehabilitation for the New Generation of War Injured

Nina A. Sayer, Ph.D., L.P., Center for Chronic Disease Outcomes Research, Minneapolis VA Medical Center

Modern warfare is resulting in new and complex patterns of blast-related injuries. The severity and pattern of blast injuries depends on the explosive composition and amount of material involved, surrounding environment, delivery method, distance between the victim and the blast, and presence of intervening protective barriers or environmental hazards. Blast-related injuries are often “polytraumatic,” meaning that they result in impairments in more than one body system or organ at the same time. Due to improvements in body armor, as well as in battle site and acute trauma care, more severely injured service members are now surviving beyond the acute phase of blast injuries.¹⁻³ The severity of their injuries results in significant impairments and adjustment challenges for injured soldiers and their families.

Complex Rehabilitation Needs

Individuals with polytraumatic and blast-related injuries have complex rehabilitation needs. New structures and processes of care are needed to maximize their functional and psychosocial outcomes. Recognizing this, Congress authorized and the Secretary of Veterans Affairs designated four Polytrauma Rehabilitation Centers located in Minneapolis, Minn., Palo Alto, Calif., Richmond, Va., and Tampa, Fla. These Polytrauma Rehabilitation Centers provide specialized inpatient rehabilitation treatment and have expanded expertise in this important clinical area throughout VA. To promote evidence-based practice within the care structures being developed for new veterans with severe combat injuries, VA HSR&D and Rehabilitation Research & Development

Service funded the Polytrauma and Blast-Related Injuries (PT/BRI) QUERI. The PT/BRI QUERI is partnering closely with the Polytrauma Rehabilitation Centers to fulfill its mission and goals.

The mission of the PT/BRI QUERI is to promote the successful rehabilitation, psychological adjustment, and community reintegration of individuals who have experienced polytrauma and blast-related injuries. The scope of the PT/BRI QUERI research portfolio includes the range of health problems, and health care system and psychosocial factors that affect veterans with polytrauma and blast-related injuries. High priority goals include development of data systems for tracking injured service members and monitoring rehabilitation outcomes; optimizing care coordination and continuity of care; ensuring screening for “invisible” co-morbidities among blast-exposed individuals; and reducing caregiver burden.

PT/BRI QUERI is undertaking a needs assessment through two related HSR&D funded Rapid Response Projects. The first is a qualitative study which involves interviews with a select group of providers from each of the four Polytrauma Rehabilitation Centers. The second involves chart review and VA administrative data extraction for all combat injured service members from the wars in Iraq and Afghanistan who received inpatient rehabilitation at one of the four Polytrauma Rehabilitation Centers. Together, these studies will help identify gaps and needs, barriers and facilitators of best practices, and sources of variation in outcomes across the Polytrauma Rehabilitation Centers.

Broad Scope Offers Challenges

The PT/BRI QUERI faces unique challenges. First, our scope is broad, spanning the continuum of care from the DoD to the VA to community-based facilities and including multiple morbidities. A more narrow scope would fail to address the complex reality of individuals with polytraumatic battlefield injuries. Within this broad scope, however, we are prioritizing traumatic brain injury (TBI), which presents in the context of other combat-related injuries (TBI with polytrauma). We selected this as our primary focus because of the prevalence of blast-related TBI with polytrauma in new veterans. Traumatic amputation is our second priority clinical area.

A second challenge is that evidence-based practices for individuals with polytraumatic and blast-related injuries are less well-defined than for other QUERI conditions. While significant, this challenge is not uncommon in medicine. To meet this challenge, the PT/BRI QUERI is drawing from related fields of medicine, promoting research to expand the evidence base for practice, and using the “best available” evidence, including expert consensus. Ultimately, the PT/BRI QUERI aims to promote evidence-based rehabilitation for the new generation of war-injured as well as advance the science of implementation. ■

References

- 1 Scott SG, Vanderploeg RD, Belanger HG, et al. Blast injuries: Evaluating and treating the postacute sequelae. *Federal Practitioner* 2005; Jan:67-75.
- 2 Peake JB. Beyond the purple heart—continuity of care for the wounded in Iraq. *New England Journal of Medicine* 2005; 352(3):219-22.
- 3 Okie S. Traumatic brain injury in the war zone. *New England Journal of Medicine* 2005; 352(20):2043-47.

Implementation Science to Publish QUERI Issue

This fall, BioMed Central's new journal *Implementation Science* will publish a special issue devoted to VA's QUERI—a quality improvement program designed to facilitate the implementation of research findings into routine clinical practice. This issue will describe the evolution of the QUERI program and its contributions to the field of implementation science.

A New Field

Implementation science is a new field in which standard frameworks, tools, and even definitions are yet to be developed. QUERI was created eight years ago as a groundbreaking initiative and its investigators have much to share that may provide insight into this exciting new field, including valuable lessons learned. Articles in this special issue will provide an overview of the Veterans Health Administration (VHA) and the QUERI program, and will discuss QUERI models and tools, organizational factors that support or impede implementation interventions, and case studies. The issue also will include commentaries by both VA and non-VA collaborators who offer their perspectives on QUERI.

The issue presents the QUERI process and implementation research framework, and emphasizes the need to measure strategies and impacts over time. Sustaining impacts is a critical focus for QUERI, and marketing is an important component of sustainability. One article describes the marketing effort behind the national rollout of a collaborative care intervention for depression treatment in primary care settings, while other articles discuss regional implementation strategies. For example, a QUERI case study describes how the QUERI process was used to determine whether undiagnosed HIV infection is high-risk and/or

high-volume among veterans seen in a group of VA clinics. Based on an initial assessment, QUERI then developed and initiated a pilot project aimed at improving rates of HIV testing in one VA network. Additional case studies highlight lessons learned from a series of projects aimed at improving eye care for veterans with diabetes, and the application of implementation research methods to improve care for veterans with schizophrenia.

Organizational Factors Play Role

The upcoming QUERI-themed issue of *Implementation Science* also focuses on organizational factors surrounding implementation research, such as building and leveraging system support, strategies and tools for partnering with VA's Internal Review

Boards (IRBs), and the influence of organizational characteristics on implementation research. The issue will help those interested in implementation science to understand the strategies, processes, and factors that assist or hinder implementing evidence-based interventions aimed at improving the health and health care of our nation's veterans.

Implementation Science is an open access, peer-reviewed online journal that publishes research relevant to the scientific study of methods to promote the uptake of research findings into routine healthcare in both clinical and policy contexts. For more information about the journal, visit www.implementationscience.com; also see the HSR&D web site at www.hsr.d.research.va.gov for an upcoming announcement about the publication of the QUERI-theme issue. ■

HSR&D Cyber Seminars Program Features QUERI Sessions

VA's Health Services Research and Development Service (HSR&D) Cyber Seminars program is hosting a series of sessions about implementation science and research featuring presenters from VA's QUERI. QUERI research examines methods to accelerate the implementation of evidence-based clinical practices in routine health care settings. During the cyber seminar sessions, QUERI investigators will share information about their implementation processes, methods, and lessons learned. The first series of sessions targets the role, value, and application of formative evaluation as it pertains to implementation research. This series of seminars also will describe the importance and role of four stages of formative evaluation in gaining a better understanding of how to implement research evidence into clinical practice to improve the quality of health care.

Those who may benefit from participating in these sessions include clinicians, researchers, administrators, and policymakers interested in learning more about implementation science and the tools needed to promote evidence-based medicine. Recorded versions of the recently completed QUERI sessions are available for on-demand viewing. Additional sessions in the QUERI series will be scheduled for Fall 2006. Also relevant to this audience are the cyber seminars offered by HSR&D's Resource Centers on topics such as the economic evaluation of VA data, clinical informatics, and measurement methods and techniques.

To register for upcoming sessions, access archived sessions, or learn more about the Cyber Seminars program, please visit www.hsr.d.research.va.gov/for_researchers/cyber_seminars/.

Therefore, as a means for both prompting and guiding primary care brief alcohol counseling and capturing documented counseling electronically for performance monitoring, we are developing and evaluating electronic clinical reminders for brief alcohol counseling in the VA Computerized Patient Record System. Based on testing in two VA Networks it appears that clinical reminders increase rates of brief alcohol counseling at sites where primary care providers are required to use clinical reminders.

In conclusion, we expect that successful implementation of brief alcohol counseling will require a national performance measure for brief alcohol counseling, and that the optimal approach to both implementing and monitoring this evidence-based practice may be a standardized national clinical reminder. Such a reminder would provide

education and decision-support to providers regarding important components of brief alcohol counseling, while simultaneously sending data to a central database for performance monitoring at the level of the Network or facility. ■

References

- Bradley KA, Kivlahan DR, Zhou XH, et al. Using alcohol screening results and treatment history to assess the severity of at-risk drinking in VA primary care patients. *Alcoholism: Clinical and Experimental Research* 2004; 28(3):448-55.
- Maciosek MV, Coffield AB, Edwards NM, et al. Priorities among effective clinical preventive services: results of a systematic review and analysis. *American Journal of Preventive Medicine* 2006; 31(1):52-61.

FORUM

Geraldine McGlynn, Editor-in-Chief
Margaret Trinity, Editor

Editorial Board

Martin P. Charns, D.B.A., Director, VA HSR&D Center of Excellence, Boston, MA

Phil Crewson, Ph.D., Assistant Director, VA HSR&D, Central Office

Joseph Francis, M.D., M.P.H., Acting Deputy Chief Research and Development Officer, Associate Director, HSR&D QUERI, Central Office

Rodney A. Hayward, M.D., Director, VA HSR&D Center of Excellence, Ann Arbor, MI

Shirley Meehan, M.B.A., Ph.D., Acting Director, VA HSR&D, Central Office

Michael J. Miller, M.D., Ph.D., Chief Medical Officer, VA Network #1, Bedford, MA

Eugene Z. Oddone, M.D., M.H.Sc., Director, VA HSR&D Center of Excellence, Durham, NC

Alan S. Perry, M.H.A., FACHE, Director, VA Central California Health Care System