

Health Services Research and Development Service Impacts 2000

Aging and Age-Related Changes

Study evaluates VA hospice care

VHA's National Health Plan includes access to an organized and coordinated program of hospice care for all eligible veterans who need and want such care. This study assessed the effectiveness and efficiency of programs providing hospice care to veterans. It found that hospice programs are common throughout VA and are expanding. VA medical centers have adopted two major approaches to providing services: Referring patients to non-VA community hospice for home care (65 per-cent), or providing inpatient care at VA medical centers (35 percent). Satisfaction with VA hospice care is high and has similar satisfaction levels to those of the non-VA population. VA has used these findings to expand or change hospice programs that will continue to improve the quality of end-of-life care.

Hickey, EC, Berlowitz, DR, Anderson J, Hankin C, Hendricks A, Lehner L. The Veterans Hospice Care Study: an evaluation of VA hospice programs. Final Report. February, 1998. Report Number MRR-97-004.

Study focuses on nutrition for the hospitalized elderly

Many studies have shown a strong correlation between the severity of nutritional deficits and an increased risk of adverse outcomes among the hospitalized elderly. This study examined the nutritional intake of 497 elderly patients, without cancer or other terminal conditions, who were hospitalized at VA facilities. Findings showed that 21% of these patients had an average daily in-hospital nutrient intake that was less than 50% of the calculated requirements. While this group did not differ from the other subjects in the reason for their hospital admission or the length of their hospital stay, they did lose more weight while in hospital and they had a higher mortality rate. A few of the factors contributing to the problem of inadequate nutrient in-take were the ineffective utilization of both canned supplements and nutrition support. These results show that given the difficulties of reversing nutritional deficits in elderly patients, greater attention must be paid to preventing this problem during periods of hospitalization.

Sullivan DH, Sun S, Walls RC. Protein-energy undernutrition among elderly hospitalized patients. Journal of the American Medical Association; 281: 2013-2019, 1999. IIR 92-112.

Improving long-term care for aging veterans

VA has one of the most comprehensive long-term care (LTC) programs in the nation. Nearly 30 percent of veterans are age 65 or older. A substantial number of these veterans will have LTC needs. This study sought to identify existing data on LTC and document any limitations in providing this type of care. This study compiled a three-volume Resource Guide: VA Long Term Care Programs and Services (VALTC) that is now being maintained and updated by the VA Information Resource Center (VIREC). The dissemination of the VALTC will help researchers use available VA data and guide policy makers as they make decisions about long-term care, especially for our growing elderly population.

Weaver F, Guihan M, Cowper D, Nydam T, Miskevics S. VA Guide to Long Term Care Program and Services. <http://www.virec.research.va.gov/> SDR 93-113.

Study links periodontitis with higher risk of heart disease and stroke

Oral conditions are important factors in general health and well-being. A study using data from the VA Normative Aging Study (NAS) and the VA Dental Longitudinal Study (DLS) found that subjects with advanced periodontitis were more likely to develop chronic heart disease and were at higher risk for stroke. This information helps clinicians identify patients at risk.

*Garcia, RI, Krall EA, Vokonas PS. Periodontal disease and mortality from all causes in the VA Dental Longitudinal Study. *Ann Periodontol*;3(1):339-349, 1999. RCD 93-310.*

Acute Illness and Traumatic Injury

Practices identified with improved outcomes for patients with stroke

With the emergence of effective drug therapies for the treatment of stroke, interest has increased in identifying effective practices for these patients. This study sought to describe the full array of patient outcomes associated with stroke and identify those practices associated with improved patient outcomes.

Researchers studied 1,073 patients with acute stroke from nine VA medical centers. Of these patients, 10 percent died during their hospital stay and 69 percent were discharged to the community, with 79 percent on antiplatelet or antithrombotic agents. Measures of physical function and psychological health indicate that the greatest improvement took place during the first six months after

stroke. Through the identification of practices associated with improved outcomes, health care providers will be able to increase the cost-effectiveness of care provided to acute stroke patients hospitalized in VA and non-VA facilities.

Horner RD. Commentary on "Factors Contributing to Practice Variation in Post-Stroke Rehabilitation."

HSR: Health Services Research; 32: 223-227, 1999. SDR 93-003.

VA patients receive high quality care for heart attacks

As part of the Quality Enhancement Research Initiative (QUERI), the Ischemic Heart Disease group, recently assessed VA treatment for patients suffering from heart attack (acute myocardial infarction, AMI). The study found that VA has comparable or superior quality of care for veterans with AMI compared to the private sector in three main areas: key validated quality measures (including the use of aspirin, beta-blockers and ACE inhibitors and in avoiding the use of calcium channel blockers); guideline compliance, and; cardiac procedure use. The study also found that VA needs to decrease the time between a patient's arrival at a treatment facility and the administration of a thrombolytic agent.

QUERI IHD Group. The Treatment of Acute MI in the Veterans Health Administration: Quality

Assessment. Acute Myocardial Infarction Report, Quality Enhancement Research Initiative Ischemic Heart Disease Group, May 21, 1999. QUERI IHD.

Study establishes national baseline measures to evaluate cardiac care

Acute myocardial infarction (AMI), a type of heart attack, is a leading cause of mortality and morbidity among veterans and the general population. Information from the Center for the Study of Practice Patterns in Veterans with AMI has helped policymakers, clinicians, and administrators better understand patterns of care for veterans hospitalized with AMI. Analyses of a national database that includes all VA hospitalizations for AMI between 1988 and 1997 have yielded several important findings: 30 day mortality rates for veterans with AMI decreased by 23 percent between 1988 and 1997; cardiac catheterization increased by 30 percent, bypass surgery by 50 percent, and coronary angioplasty by 176 percent between 1988 and 1995; and mortality rates for veterans with AMI were similar between those initially hospitalized in VA vs. Medicare-financed hospitals between 1992 and 1996. Study publications have addressed issues related to access, effectiveness and cost of cardiac care in the VA and have helped establish national baseline measures that can be used to evaluate the effectiveness and quality of current and future cardiac care for veterans.

Petersen LA, Wright SM, Normand SL, Kluiber S, Daley J. Positive predictive value of the diagnoses of acute myocardial infarction in the VA patient treatment file. J Gen Intern Med, 14(9):555-558, 1999. PPR 94-001.

Military Occupational and Environmental Exposures

INFECTIOUS AGENTS

VA care for HIV is at least as cost-effective as non-VA care

VA is the nation's largest provider of care to HIV-infected individuals. This study examined data from two projects that included more than 2,000 HIV-infected patients receiving care at VA facilities, non-VA facilities, or patients who used both VA and non-VA health care providers. Findings show that even after considering patients' clinical and socioeconomic characteristics, there were no differences among VA-only users, dual VA and non-VA users, and only non-VA users for most of the health care utilization measures. Further, overall results indicate that for HIV-infected patients, care provided at VA settings is at least as cost-effective as care provided at non-VA settings.

Menke TJ, Rabeneck L, Soucek J, Wray NP. Comparison of Department of Veterans Affairs (VA) and non-VA health care utilization and outcomes among HIV-infected men. Annual meeting of the Association for Health Services Research (AHSR). Chicago, 1999. IIR 95-107.

Chronic Diseases

PROSTATE CANCER

Patients and clinicians rate quality of life

Prostate cancer is the most common cancer among veterans today. This study evaluated changes in veteran patients' quality of life for 12 months following diagnosis, and compared patients' and VA clinicians' ratings of several aspects of health, such as pain, mood, energy, bladder and bowel function, and appetite. Patients and clinicians were asked to rate symptoms in terms of severity and order of importance. Results of this study showed that there was a high concordance between the clinician and patient ranking of the over-all current state of the patient's health. However, while 69 percent of clinicians ranked

sexual function as least important, 37 percent of the patients ranked it as one of their three most important considerations. The results of this study help health care providers better understand quality of life-related concerns of patients.

Kim S, Knight S, Chan C, Chmiel J, Falcone D, Smith J, et al. Prostate cancer quality of life and outcomes research among patients with low socioeconomic status: An Overview of the VA CaPOS Project. Oncology;13(6):823-32, 1999. IIR 95-120.

Mental Illness

Study contributes to medication guidelines for schizophrenia management

Antipsychotic medication is an essential component of treatment for schizophrenia; the second most common discharge diagnosis in VA. A study examined the relationship between patient outcomes and the management of medication for schizophrenia. Results showed that 49 percent of patients receiving care through a VA medical center or state psychiatric hospital were prescribed doses outside the range recommended by practice guidelines for schizophrenia. This study also showed that patients who were prescribed medication within practice guidelines had significantly less severe symptoms. Findings from this study have contributed to the selection of national performance measures for the VA that will improve the quality of medication management and better patient outcomes.

Kirchner JE, Owen RR, Nordquist C, Fischer EP. Diagnosis and management of substance use disorders among inpatients with schizophrenia. Psychiatry Serv;49:82-85, 1998. IIR 95-020.

QUERI research shows VA networks and facilities follow practice guidelines for treating depression and schizophrenia

Mental health is one of eight diseases prevalent in the veteran population that are the focus of the Quality Enhancement Research Initiative (QUERI). The Mental Health QUERI group examines major depressive disorder and schizophrenia. Major depressive disorder costs the nation \$44 billion per year in direct (e.g., medical treatment) and indirect costs (e.g. lost productivity). Schizophrenia costs exceed \$30 billion per year. Medications reduce symptoms in a large percentage of patients with these illnesses but unfortunately, medication management for both of these is often lacking. With treatment concerns in mind, the Mental Health QUERI recently conducted a survey to elicit information about clinical practice guideline implementation efforts for major

depression and schizophrenia at the VA network and facility levels. The survey found that the majority of network and facility mental health leaders reported guideline implementation efforts for these illnesses. Results also suggest that additional efforts could be made to implement and evaluate mental health guidelines and address any barriers to implementation. Mental Health QUERI continues to monitor these activities, and will develop and disseminate tools, such as mental health clinical reminders and pocket cards, to promote guideline implementation.

Health Services and Systems

Research efforts put outcomes data into practice

HSR&D researchers are putting important information about patient outcomes into the hands of VA managers, where it can be used to evaluate and improve the quality of care received by veterans. The researchers studied outcome and utilization rates within the VA from 1995-97 and analyzed morbidity and mortality rates as screens for quality of care. Study findings are published electronically on a VA web site ensuring rapid dissemination to VA managers and clinicians. Some of the mortality rates computed for this study are posted on VA's electronic report card by the VA National Performance Data Resource Center so that VA managers and clinicians can use them for quality improvement purposes.

Petersen NJ, Ashton CM, Soucek J, Menke T, Collins TC, Foster W, Wray NP. A Cohort-Based Analysis of Utilization and Survival Rates Across the VA Health Care System, 1994-1998: Findings in Brief. Houston Center for Quality of Care and Utilization Studies. May 1999. SDR 98-001.

Veterans Health Study provides outcomes information critical for VHA's quality improvement efforts

The Veterans Health Study (VHS) followed 2,425 veteran patients for four years monitoring outcomes of care in VA and developing health status assessments. One of the measures used in this study was a 36 item short form health survey study (the SF-36V) that has proven to be an extremely valuable tool for measuring health status. Since this study, the SF-36V has been administered more than 200,000 times from 1996 to 1998 and is currently being used in a VA national demonstration project examining the use of this survey by clinicians in the routine care of patients. The Veterans Health Study provides critical tools and

information necessary to evaluate the quality of care in the Veterans Health Administration.

Kazis LE, Wilson N, Rogers W, Lee A. Health outcomes of veterans using the SF-36V: 1998 national survey of ambulatory care patients. 17th Annual VA HSR&D Service Meeting, Health Services Research at the Interface, 1999. SDR 91-006.

Teledermatology, using digital imaging technology, paves the way for better care for veterans with limited access to health-care delivery

Digital images of visual information can be transmitted within telemedicine networks. This study compared the reliability for the diagnoses and management plans given by clinic-based examiners to those of consultants using digital imagery. Preliminary results show that dermatologists agree on their diagnoses of skin lesions equally well whether evaluating the patient in person or reviewing the digital image. In addition, investigators found diagnostic accuracy to be comparable among clinic-based and digital image examiners. This study suggests that the clinical use of digital imaging is an appropriate alternative for patients with limited access to adequate clinical care.

Whited JD, Hall RP, Simel DL, Foy ME, Stechuchak KM, Drugge RJ, et al. Reliability and accuracy of dermatologists' clinic-based and digital image consultations. J.Am.Acad.Dermatol;41(5 Pt 1):693-702, 1999. IIR 95-045.

Ambulatory Care Quality Improvement Project promises to improve quality of care

The Ambulatory Care Quality Improvement Project is determining whether quality and outcomes of care improve when primary care providers have access to regular assessments of their patients' health along with routine clinical data and information about clinical guidelines. The project system collects patient reports on health status and satisfaction and links them with clinical data. It then packages all of this information into concise reports for primary care providers along with evidence- and guideline-based practice information. Instruments developed for this study, including the Seattle Angina Questionnaires (SAQ) and the Seattle Obstructive Lung Disease Questionnaire have been well received and are presently being used in ongoing clinical trials. The SAQ has been adopted by the Medical Outcomes Trust and translated into several languages. Data from the project are currently being used in VA's Quality Enhancement Research Initiative.

Reiber GE, McDonnell MB, Schleyer AM, Fihn SD, Reda D. A comprehensive system for quality improvement in ambulatory care. In: Assal J, Golay A, Jisser A, editors. New Trends in Patient Education, Amsterdam: Elsevier, 1999. SDR 96-001.

Researchers provide critical budgeting and forecasting information to VA managers

Medical care cost recovery - the process by which the VA bills private, third-party insurers for treatment of non-service connected conditions - is of great financial importance to VA. Accurate projections of future potential revenues require extensive analysis of VHA utilization patterns and insurance information for users of VA services. VA researchers are helping the Office of Medical Care Cost Recovery forecast these cost recoveries into Fiscal Year 2002. As a result, VA Head-quarters has changed the way it sets goals for third-party payment collections by the 22 Veterans Integrated Service Networks. These projections are also used in VA's budget negotiations with the Office of Management and Budget.

Hendricks, AM. A Model for MCCR Projections. Study reports from MRR 99-005 for the Chief Finance Office. 1997-1998. MRR 99-005.