

HOME-BASED PRIMARY CARE

The Care of the Veteran at Home

Home-Based Primary Care is a program designed by the Department of Veteran Affairs (VA) to care for frail, medically complex, elderly veteran patients in their home setting. Unique to the VA, the program has similarities and differences in relation to typical Medicare/Medicaid home health and hospice programs. The VA has demonstrated success in maintaining the patients' independence and quality of life as well as exceptional management of chronic disease and prevention.

The Department of Veterans Affairs (VA) recognizes the uniqueness of the veteran population. Many elderly veterans are chronically ill with multiple comorbidities. It is this fragile population that prompted the VA to take a close look at how best to care for aging veterans while allowing them the independence of living in their home environment and to create Home-Based Primary Care (HBPC).

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Background

Care of the elderly in their home setting is not a new concept. In the United States, home health service had its beginnings in the early 1790s, when visiting nurse associations and other charitable organizations began providing nursing care to the sick poor, primarily for the care of mothers and children, out of the Boston Dispensary (The Bostonian Society, 2005). The VA modeled the HBPC program after the prototype for a hospital-based home care program developed by Dr. E. M. Bluestone at the Montefiore Hospital in New York City in 1947, although without homemaker services (Spiegel, 1987).

The HBPC program, originally titled Hospital-Based Home Care, was established in 1970 as a demonstration project at 6 teaching VA hospitals under the VA regulation, which authorized outpatient follow-up services. In fiscal year 1972 (October 1 to September 30), funding was secured for the 6 demonstration hospitals. Since that time, HBPC has grown to a total of 116 programs nationwide caring daily for an average of more than 12,500 veterans per year.

The major influence upon the provision of home health services in the community was the enactment of the Health Insurance for the Aged and Disabled Act, Medicare, for most Americans older than 65 years or disabled. To be eligible for home health coverage under Medicare, the patient must essentially be confined to his or her residence, be under a physician's care, and need intermittent skilled nursing care and physical, occupational, or speech therapy. The care must be prescribed by a physician, and the services provided must be in accordance with the physician's treatment plan (Social Security Administration, 2006).

The HBPC program was conceptualized as having the ability to care for a specific target population that can be cared for in the home. The program philosophy was planned and developed to provide in-home long-term care services for the chronically ill patient that are not available under federal or state programs such as Medicare or Medicaid. The HBPC program was specifically planned to be a geriatric program in which the skills and knowledge of a geriatrician would set the tenor for the medical care delivered. The program was not designed to be an alternative to institutional care, but rather to provide quality geriatric care to patients unable to return to the outpatient clinic. The program was not designed

for all patients, but only for those with selected disease processes that can be comfortably provided care at home (i.e., cardiac patients, diabetics, arthritics, terminal patients, and those with chronic pulmonary diseases).

Target Population

The HBPC program targets frail, chronically ill veterans who require the skills of an interdisciplinary healthcare team (continuity, coordination of care, and integration of diverse services) to cover their complex medical, social, rehabilitative, and behavioral care needs. As they age, these veterans need comprehensive, longitudinal home care services to maximize function, minimize institutionalization, and maintain their quality of life. Often, these veterans require more care than can be provided during routine clinic visits. The veteran typically experiences frequent visits to the emergency room or requires frequent and often lengthy acute hospitalizations.

On the basis of the U.S. Census reports for the year 2000, there were 35 million people older than 65 years, with 14 million reported to have some form of disability. In addition, the older population represented 30% or more of the total population in 10 counties across the United States, half of which were in Florida (Hertzel & Smith, 2001). The veteran population made up approximately 12.7% of the total population, with 9.7 million veterans older than 65 years. Almost 3 in every 10 veterans (29.2%) were disabled, with higher percentages of disability in the more aged population (Richardson & Waldrop, 2003). These frail elderly and disabled veterans are those who benefit most from HBPC services.

The HBPC program uses a national database for compilation of statistics. Patients are admitted, and a standardized admission form is completed by the registered nurse (RN). This form is based on the Minimum Data Set used in long-term care facilities. It is similar to the Outcome and Assessment Information Set (OASIS) form used by other agencies, although not as extensive. The average age of the 20,783 patients treated by HBPC programs nationally in the first 3 quarters of fiscal year 2006 was 76.7 years. In the patient mix, 95.6% were males, among whom 51.6% were veterans of World War II, 19.9% were Vietnam veterans, and 18.5% were Korean conflict veterans. A total of 39,635 visits were made by the staff of the 116 programs nationwide. The findings show that 59.4% of the patients lived with their spouse or other relatives and 29% lived alone.

The HBPC patient presents with an average of 19.36 diagnoses that require active and ongoing treatment and takes an average of 15 active medications. More than 60% of veterans currently in HBPC programs have mild to severe cognitive impairment, whereas approximately 42% of patients are receiving treatment for depression (Home-Based Primary Care Information System, 2006).

HBPC Versus Medicare Home Health

The HBPC program is not like Medicare Home Care. In contrast to the episodic, time-limited, and focused skilled care services reimbursed by other funding mechanisms such as Medicare, HBPC provides comprehensive care of the patient, often for the remainder of his or her life (Edes, 2006). Longitudinal care, by definition, is

the continuous provision of services that involve ongoing monitoring, routine comprehensive assessment, coordination of care, prevention or early detection of worsening condition, and timely interventions delivered throughout the protracted course of chronic disease. This is in contrast to the episodic care that is provided only at intervals of disease presentation or exacerbation (Department of Veteran Affairs, 2006).

Table 1 contrasts the target populations, processes, and outcomes of HBPC and Medicare Home Health. However, when an HBPC patient has a need for acute skilled nursing or intensive therapy interventions, HBPC may work with community home health agencies to meet the needs of the patient without its care being considered a duplication of services.

As a program within the VA, HBPC is regulated by the federal government. All HBPC programs are accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Because the oversight is by the federal government, the programs are not inspected by state agencies, nor are they considered Medicare home health agencies. They are, however, held to regulations by the federal government, and the Office of the Inspector General is free to visit, inspect, and make inquiries of any program.

HBPC Versus Hospice Care

The HBPC program has much in common with the hospice model of care described by the National Hospice and Palliative Care Organization (2006). The HBPC program uses a team approach to the holistic care of the patient, with a strong focus on training and support of the patient's residential caregiver in the daily provision of care at home. The primary difference between HBPC and hospice care is that HBPC may be provided without regard for time-limited prognosis. For example, the typical HBPC patient is chronically ill with multiple interacting disease processes, is unlikely to survive more than a few years, but may not be in the final 6 months of life. Additional differences between HBPC and hospice treatment approaches include the following considerations:

1. HBPC provides comprehensive primary care as part of its interdisciplinary team approach; it does not focus its care on management of a terminal condition.
2. HBPC provides all medications for its patients, whereas hospice has a financial responsibility for provision of terminal condition-related medications.
3. Hospice may provide home health aides directly if indicated, whereas, HBPC normally obtains health aide services through referral to community agencies.
4. Most HBPC programs do not provide chaplain support in the home or offer prolonged bereavement support services to survivors.

Table 1. Differences Between VA HBPC and Medicare Home Care

VA HBPC	Medicare Home Care
• Targets complex chronic disease	• Removable conditions
• Comprehensive primary care	• Specific problem-focused
• Skilled care not required	• Requires skilled care
• Strict homebound not required	• Must be homebound
• Accepts declining status	• Requires improvement
• Interdisciplinary team	• One or multidisciplinary
• Longitudinal care	• Episodic, post-acute care
• Reduces hospital days	• No definitive impact
• Limited geography & intensity	• Anywhere; anytime

Note. From Edes, T. (June, 2006). *Purchased Skilled Home Care & HBPC Update*. Presentation conducted at the Gateway to the Community: Veterans at Home conference, St. Louis, MO. Printed with permission.

There are times when an HBPC patient nearing the end of life requires the more intensive care of hospice. At this time, HBPC may refer to community hospice and work jointly with it to provide the needed end-of-life care. The HBPC program will maintain the primary care and provide for the overall medical care. Hospice will provide the care for the terminal diagnosis and pain management. The community hospice also will provide the extended bereavement services needed by the surviving family members. This coordination of care is not considered duplication, but rather a joint effort to provide for quality end-of-life care.

The Interdisciplinary Approach

Because HBPC is centered on the interdisciplinary team approach to the provision of primary care in the home, it is vital to the success of the program. The HBPC team approach involves a unique blend of home care, primary care, and extended care standards. The HBPC team members typically include a medical director, a program director, nurse practitioners and/or physician assistants, RNs and/or licensed practical nurses, a social worker, a dietitian, a rehabilitation medicine professional, a pharmacist, and a program assistant. These members develop the patient's plan of care with the patient and/or caregiver's input via interdisciplinary team meetings, usually within 30 days of the patient's admission to HBPC and continued every 3 months thereafter. Patients continue to receive HBPC as long as the team—with patient and/or caregiver input—judges that they are benefiting from this model of care. The most common reason for discharge from HBPC is the death of the patient. Other reasons for discharge include nursing home placement, geographic relocation, inability to benefit from the service, patient or family desire for discharge, and unsafe care setting for the patient or staff.

In some programs, the HBPC nurse practitioner (ARNP) or physician's assistant functions as the patient's primary care provider managing a defined caseload and making visits on a regular basis to evaluate the total needs of the patient in his or her environment. The ARNP examines and diagnoses acute problems and monitors and treats chronic problems. The ARNP collaborates with the HBPC medical director on a case-by-case basis as needed. If an HBPC program does not use an ARNP or a physician's assistant, then the HBPC physician is the primary care provider.

The HBPC physician (M.D.) shares responsibility for policies and procedures related to patient

care. The physician is ultimately responsible for all care provided to HBPC patients, either directly or through HBPC and consultant providers. The physician attends all weekly team meetings and is a resource for patient problems. Many HBPC physicians make home visits. The physician also is responsible for medical student education, and supervises the education for the team members.

The nursing role is provided by RNs. Some programs also have successfully used licensed practical nurses in conjunction with RNs and/or ARNPs. The nurses function as care managers for their assigned patients. They assess and continually reassess needs of the patients and caregivers and deliver nursing care in the home.

The social worker performs initial and ongoing assessments of the interpersonal resources and psychosocial functioning of the veteran patient, the caregiver, and their support system. They identify psychosocial problems and provide treatment, which may include individual and family counseling, long-term care planning, and grief and bereavement counseling. The social worker also coordinates referrals to community services, maximizing VA and non-VA resources available to the patient.

The dietitian performs initial and ongoing assessments of the patient's nutritional status, recommending and educating about special diets and dietary modifications. The dietitian assists in the monitoring of food-drug interactions and assesses the caregiver's capacity to prepare recommended meals.

The HBPC rehabilitation therapist may be an occupational therapist, a physical therapist, or a kinesiotherapist. This therapist performs initial and ongoing assessments of the patient's functional status and safety in the home environment. He or she evaluates the patient's home for structural modifications needed to make the home environment safe and accessible. The therapist determines the need for home medical equipment, then teaches and monitors the safe use of these devices. The therapist also teaches body mechanics to the caregiver to minimize risk of injury. The therapist also may establish a therapeutic program for the patient and caregiver to maximize the patient's functional status and monitor the patient's response.

Goals

The goals of the HBPC program (Department of Veteran Affairs, 2006) are to

- Promote the patient's maximum level of health and independence by optimizing physical, cognitive, and psychosocial function
- Reduce the need for and provide an acceptable alternative to hospitalization, nursing home care, and emergency room and outpatient visits through care that provides close monitoring, early intervention, and a therapeutic safe home environment
- Assist in the transition from a healthcare facility to home by providing education, guiding rehabilitation, adapting the home as needed for safety, and arranging and coordinating supportive services
- Support the caregiver in the care of the patient
- Meet the changing needs and preferences of the patient and family throughout the course of chronic disease, often through the end of life
- Enhance the patient's quality of life through symptom management and other comfort measures
- Allow the patient the option of dying at home rather than in an institution
- Help the patient and family cope with all elements of chronic disease
- Provide bereavement care to the family after the death of the patient
- Promote a network of skilled home care professionals by providing an academic and clinician

cal setting for healthcare trainees to experience interdisciplinary delivery of primary care in the home.

Outcomes

The HBPC program promotes the patient's independence in the home environment. Numerous quality measures, including those reported to the JCAHO ORYX program, are monitored to ensure quality and consistent performance of the programs. These performance measures are used to benchmark the HBPC programs across the nation. The following are a sampling of the ORYX data. The figures shown are from Bay Pines VA Healthcare System and include the national range and comparative mean for all facilities.

The quality-of-life measure takes into consideration numerous facets of a patient's life: psychosocial well-being, completion of an advance directive, nutrition/hydration status, pain, dyspnea, and depression. Each patient is assessed for these components at admission and then annually. The assessments are completed by various disciplines and guide the care treatment plan. This plan is written by the interdisciplinary team under the direction of the HBPC physician, with interventions aimed at promoting the patient's quality of life. Nationally, HBPC programs have demonstrated success at promoting quality of life for their patients (Figure 1).

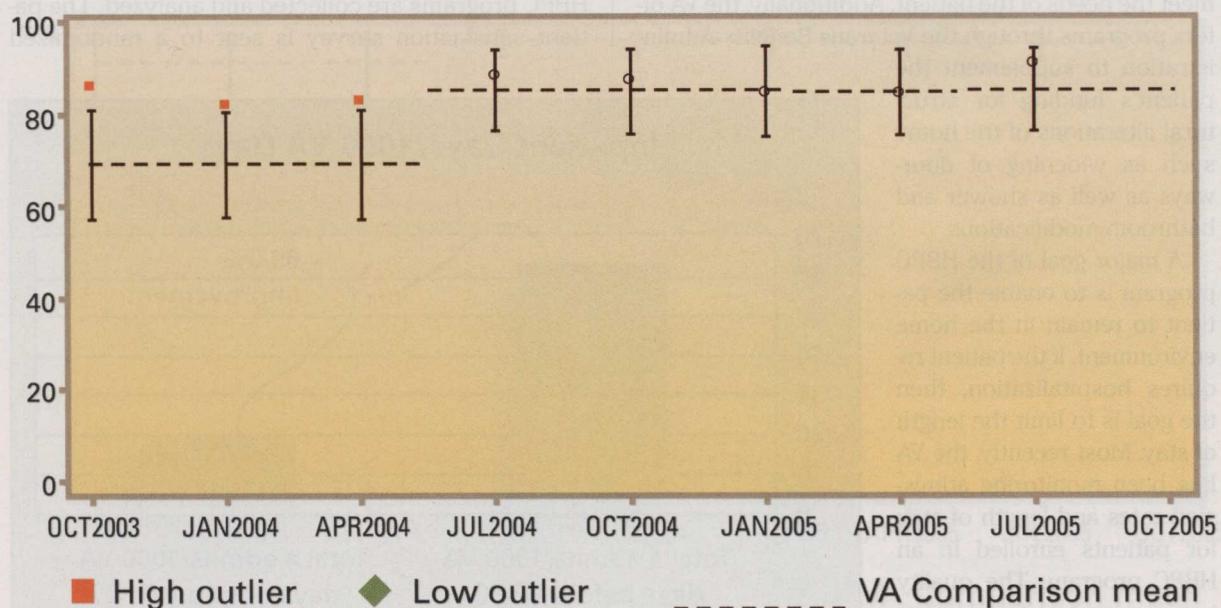


Figure 1. Home Care Accreditation Program, quality-of-life planning, Bay Pines. Derived from Joint Commission on Accreditation of Healthcare Organizations (JCAHO) ORYX data reported for Bay Pines VA Healthcare System. Data show national range of data, together with the comparative mean.

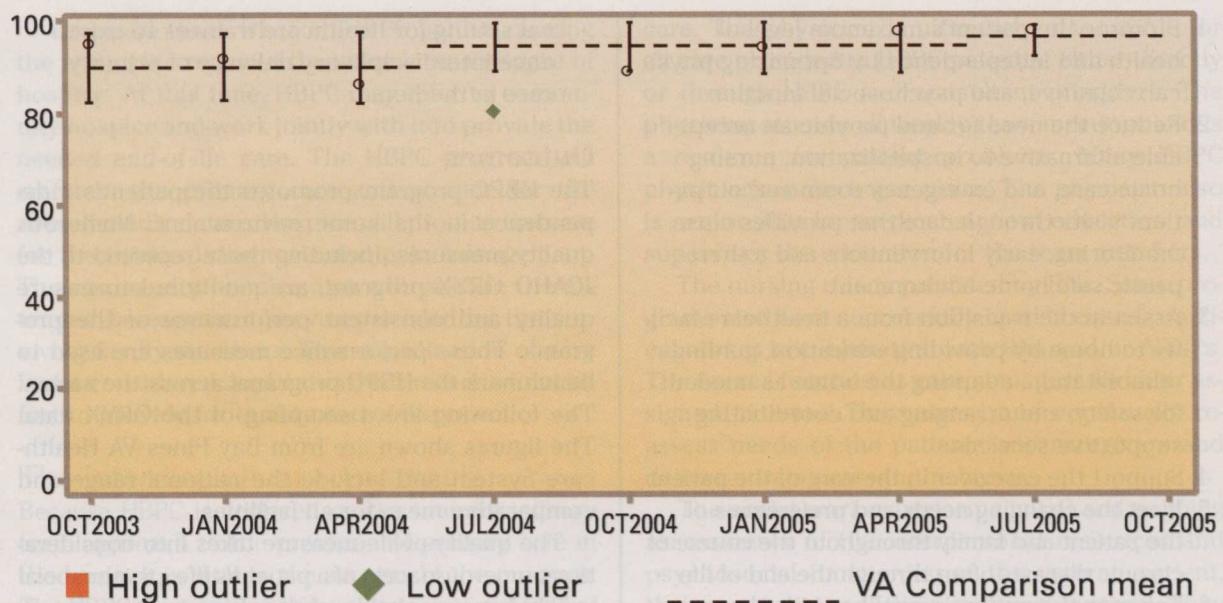


Figure 2. Home Care Accreditation Program, adaptive equipment, Bay Pines. Derived from JCAHO ORYX data reported for Bay Pines VA Healthcare System. Data show national range of data, together with the comparative mean.

All the patients in the program are assessed for their need of adaptive/assistive equipment, and the appropriate equipment is ordered (Figure 2). Equipment such as ramps and bathroom items are ordered to promote patient safety. Home modifications may be recommended, if needed, to adapt a home to meet the needs of the patient. Additionally, the VA offers programs through the Veterans Benefits Administration to supplement the patient's funding for structural alterations of the home such as widening of doorways as well as shower and bathroom modifications.

A major goal of the HBPC program is to enable the patient to remain in the home environment. If the patient requires hospitalization, then the goal is to limit the length of stay. Most recently, the VA has been monitoring admission rates and length of stay for patients enrolled in an HBPC program. The quality improvement data measure hospital admissions and inpatient days of care for the 6 months before enrollment

and 12 months after enrollment in the program. During fiscal year 2006, the HBPC program showed a nationwide 27% reduction in hospital admissions and a 69% reduction in inpatient days of care after admission to an HBPC program (Figures 3 and 4).

Each year, the patient satisfaction surveys for the HBPC programs are collected and analyzed. The patient satisfaction survey is sent to a randomized

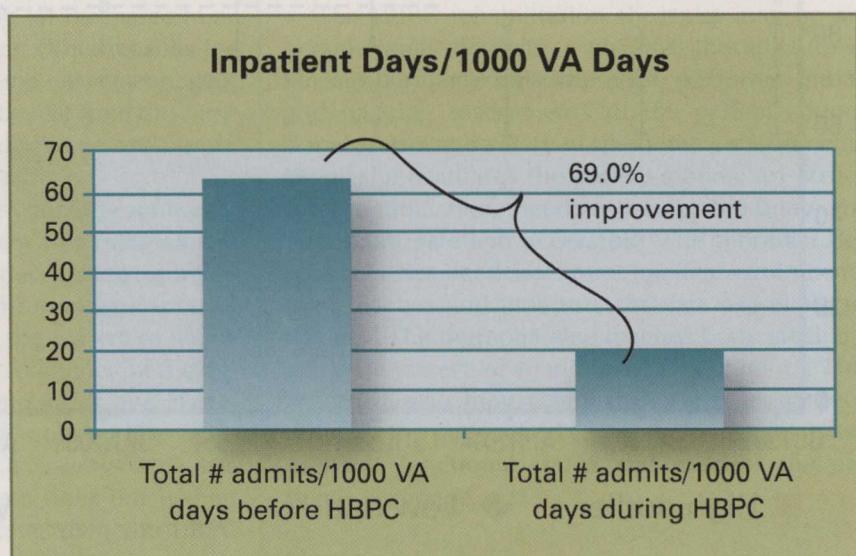


Figure 3. Inpatient days/1000 VA days. Data from HBPC national database (unpublished raw data).

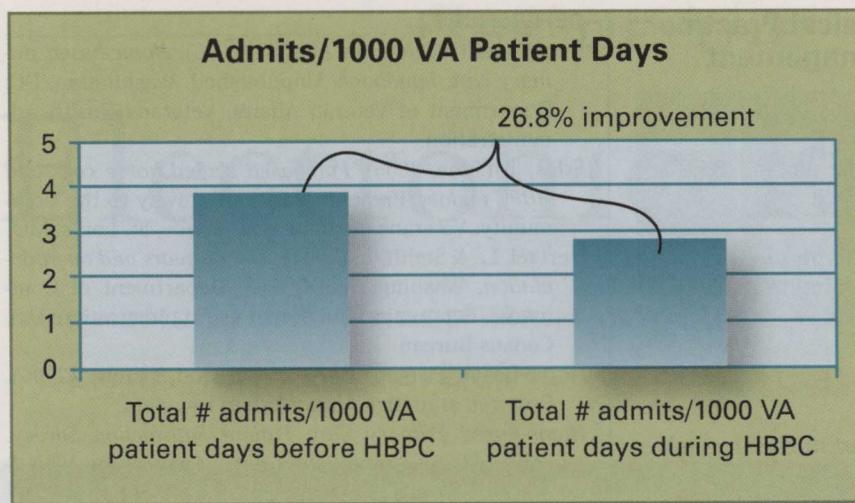


Figure 4. Admits/1000 VA patient days. Data from HBPC national database (unpublished raw data).

sample of patients receiving care through HBPC programs at each of these facilities. The results indicate that patients are very satisfied with the care they receive, with 98% rating their care as either excellent or very good ("Home-Based Primary Care Patient Satisfaction Survey," 2006).

It has been acknowledged that the care of this frail veteran population may cause considerable stress for the caregivers. In fiscal year 2007, all HBPC programs will formally assess caregiver bur-

den stress using the same caregiver burden scale. Interventions will be directed toward helping the caregiver cope with his or her stress.

In addition to program-specific outcome measures, HBPC must comply with clinical practice guidelines established for disease management. These include screening for cancer, post-traumatic stress disorder, tobacco and alcohol use, and osteoporosis, as well as the management of diabetes, congestive heart failure, hypertension, ischemic heart disease, and hepatitis

C. Prevention indicators ensure that the patient receives appropriate immunizations (Figure 5), including those for pneumovax, influenza, tetanus, and diphtheria.

A review of the compliance records for 3 HBPC programs (Bay Pines, Tampa, and North Florida/South Georgia) demonstrates exceptional management of patients with chronic diseases, and provides an example of what is typically seen throughout the VA system (Table 2).

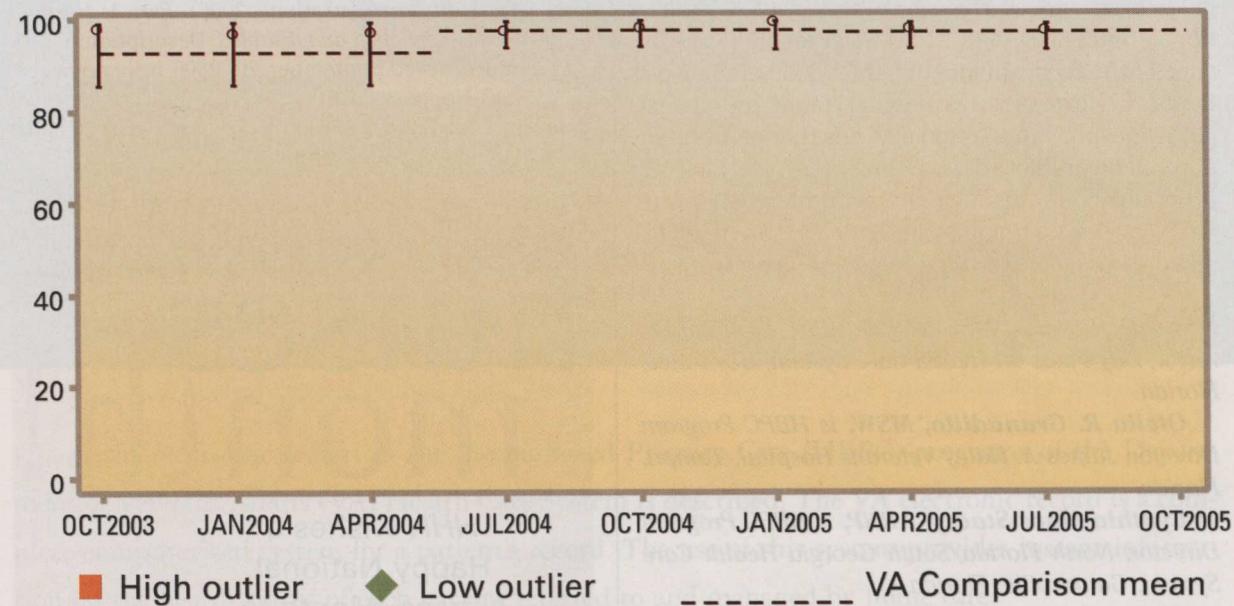


Figure 5. Home Care Accreditation Program, pneumococcal immunizations, Bay Pines. Data derived from JCAHO ORYX data reported for Bay Pines VA Healthcare System. Data show national range of data, together with the comparative mean.

Table 2. Compliance Clinical Practice Guidelines: Disease Management

Hemoglobin A1C <8	78%
Blood pressure <140/90 (with diagnosis of hypertension)	84%
Low-density lipoproteins <100 (with diagnosis of acute myocardial infarction >8 weeks)	80%

Note. Derived from external peer review records, 3 sites.

A formalized study, published in the December 13, 2000 edition of the *Journal of American Medical Association* showed findings similar to those reported through current national databases (Hughes et al., 2000). Hughes demonstrated that the use of an interdisciplinary team, such as that implemented through the HBPC program, improved patient and caregiver satisfaction, reduced hospital readmissions at 6 months, and improved caregiver quality of life overall.

Summary

The VA designed HBPC to meet the specific needs of fragile, chronically ill veteran patients. These patients have multiple needs and require an interdisciplinary team. The HBPC programs all comply with national Veterans Health Administration guidelines, and all are accredited by JCAHO. National outcomes data show successful performance of the teams in meeting the needs of their patients. Performance, as demonstrated by clinical guideline indicators, often exceeds that of other VA outpatient primary care settings. Currently, HBPC programs continue to expand with the goal of providing access to home-based primary care to all eligible veterans, regardless of geography. ■

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